RELATIONSHIPS OF IMPORTANT ELEMENTS OF THE STUDENT TEACHING EXPERIENCE AND METHODS OF STUDENT TEACHING PLACEMENT TO THE QUALITY OF EXPERIENCE OF STUDENT TEACHERS

A Dissertation

by

DOUGLAS GLENN MORRISH

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2003

Major Subject: Agricultural Education

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Approved as to style and content by:

Julie F. Harlin (Chair of Committee)	Gary E. Briers (Member)
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ABSTRACT

Relationships of Important Elements of the Student Teaching Experience and Methods of Student Teaching Placement to the Quality of Experience of Student Teachers. (August 2003)

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Chair of Advisory Committee: Dr. Julie F. Harlin

The purpose of this study was to determine important elements and placement practices of student teaching as perceived by teacher educators and how well each student teacher perceived his/her quality of experience based on these criteria. Data were collected using mail questionnaires following procedures by Dillman (2000). Three different mail questionnaires were used to gather information from 50 different head teacher educators (35 responding), 77 teacher educators (45 responding), and 204 student teachers from the 2001-2002 academic school year (140 responding).

Head teacher educator respondents indicated that the number one placement practice for placing student teachers was that of the cooperating teacher having at least three years teaching experience (mean = 4.61).

Teacher educator respondents indicated that a cooperating center having access to the World Wide Web (mean = 4.79) was the most important element of a cooperating center. Additionally, teacher educators indicated that a cooperating teacher who

supports other school activities was the most important cooperating teacher element (mean = 4.28).

As a whole, student teachers indicated that they learned a great deal from their student teaching experience (mean = 4.65) and that the student teaching component of their teacher education program was the most valuable component (mean = 4.54).

Statistically significant relationships between student teacher perceptions of their cooperating center elements and the quality of their student teaching experience existed. The elements with a positive correlation and statistical significance included cooperating center facilities (r = .540), school and community relationships (r = .447), and cooperating teacher and student teacher relationships (r = .853).

The correlation coefficient (r = .389) between the level of importance of student teacher placement methods and the quality of the student teacher experience indicated a low positive relationship (Davis, 1971), but was not significant at the .05 alpha level. This indicated that the more time and effort teacher educators spend on placing student teachers may increase the student teacher's quality of experience.

DEDICATION

This dissertation is dedicated to my family and friends. Thank you for all the support, love, and encouragement throughout my stay at Texas A&M University. You have carried me through the program by sacrificing many things and carrying a bulk of the financial responsibilities. Encouragement to pursue a doctoral degree was greatly appreciated, and I hope it is worth as much to you as it has been to me. I do not know how to thank you for all of your guidance and perseverance while I was here. I could not have done any of this without you! During the tough times, you were always there and pushed me to be as successful as possible. Thank you all for always being there and encouraging me to pursue my dream. I love all of you very much.

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you to complete many more challenges and milestones in the future. Thanks to everyone! It has been one of the most memorable experiences in my life thus far.

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CHAPTER I

INTRODUCTION

Teacher education in agriculture has undergone numerous changes from the initial development of the discipline (Martin & Berkey, 1981). Society has seen a paradigm shift from an industrial-based entity to a more technological, information rich society. Some of these changes have had a direct impact on teacher education programs directed toward agriculture science. These implications include 1. the improvement process regarding standards and competencies of teachers, and 2. the changing role of agriculture teachers and the roles they must fill (Martin & Berkey, 1981). With the roles of agriculture teachers becoming more specialized and demanding, teacher education programs must revisit their mission, values, and goals. Curriculum, FFA activities, supervised agriculture experiences, and agriculture students are ever changing (National Research Council, 1988). Teacher education programs must supply their graduates with up-to-date curriculum and experiences related to these areas during their tenure of on and off-campus duties (Norris & Larke, 1989). Teacher education programs in agriculture must provide the student teachers a quality student teaching experience to aid in the recruitment and retention of good teachers (Camp, 2000).

Currently, teacher education programs are not consistent with regard to placement methods of student teachers, while the perceptions of the important elements

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This dissertation follows the style and format of the *Journal of Agricultural Education*.

and criteria of the student teaching experience differ from program to program (Deeds, Arrington, & Flowers, 1988; Deeds & Barrick, 1986; Norris & Larke, 1989). The significant questions at hand are "What method of placing student teachers is appropriate, and what elements and criteria should be used when choosing the most effective cooperating center and teacher to ensure that the student teacher has a high quality experience?" In the past, many teacher education programs have developed specific criteria and characteristics for selecting schools and teachers, but unfortunately not all student teachers of these programs were receiving a good experience (Rome & Moss, 1990). Cruickshank (1985) stated, "We have operational definitions of what ideal laboratory experiences should be like, but in practice the reality falls short of the ideal" (p. 33). Curriculum, facilities, and student populations in the secondary agriculture classroom have undergone change, and the former criteria and characteristics used in the student teacher placement process are of little concern today (Abel, Ansel, Hauwiller, & Sparapani, 1986). It was the purpose of this study to investigate the important practices of student teacher placement and the characteristics and criteria used when selecting cooperating schools and teachers to ensure a high quality student teaching experience.

Another main concern of teacher educators is preparing future teachers to stay current in such an ever-changing, technological industry as agriculture. Flatt (1987) stated that the future of agricultural education at the secondary level will depend upon the teacher training programs in agriculture to adapt to modern agriculture. Presently, agricultural education instructors are faced with these technological advancements and changes in an everyday sense (Brown, 1989). Agricultural education at the secondary

school level has also been faced with a changing clientele/student population (National Research Council, 1988).

With all of these changes taking place, teacher education programs have to place student teachers in a context that provides the student teachers the best possible experience (Rome & Moss, 1990). Burton (1988) also stressed the importance of future teachers to deliver current curriculum and be able to accommodate all secondary students in the classroom. The researcher suggested the need for future teachers to be trained in adapting and implementing new types of teaching skills (Burton, 1988). It was the job of the teacher education programs to choose the correct cooperating center and teacher to ensure the most effective training and experience of the student teacher (Nelson, 1981). The determination of these student teachers' perceptions regarding their preparation programs could be beneficial in helping the teacher education programs identify areas that need improvement (McGhee & Cheek, 1989). In addition, the overall effectiveness of the student teacher placement process may be improved after comparing the student teachers' perceptions of their student teaching experience to those of the teacher educators.

Statement of the Problem

Teacher education in agriculture has undergone many changes in the past years due to an enormous paradigm shift in society. Society has changed from a rural, production agriculture to a faster paced, technological entity. Teacher education has to

revamp curriculum to stay current and allow the student teachers of their program to be the most effectively prepared. Student teacher placement methodology differs from program to program (Borne & Moss, 1988; Norris & Larke, 1989). Borne and Moss (1988) stated that teacher education programs in the Southern Region lacked uniformity in the way that they conducted the student teaching component. The different programs were inconsistent in the placement procedures and the curriculum that was taught to the student teachers (Borne & Moss, 1988). Several questions have been posed by previous research regarding the teacher education program and student teacher placement. Borne and Moss (1988) put forth the question of "Could one set of criteria be used when placing student teachers?" The researchers also questioned how student teaching centers and cooperating teachers were fulfilling the expectations of the teacher educators.

Teacher educators had mixed views on what they felt were important elements to include in the student teaching experience. These elements had become an important factor, or should become an important factor, when the student teacher placement process begins; these elements may have a huge impact on the quality of the student teacher experience (Norris & Larke, 1989). Obviously, having a good experience is important to the agricultural education profession due to the demand for agriculture teachers, according to Camp (2000).

Purpose of the Study

There were two purposes of the study. The first purpose was to determine

important elements of student teaching as perceived by teacher educators and to determine the important practices for placing student teachers with cooperating schools and teachers. The second purpose of the study was then to determine how well each student teacher perceived his/her quality of experience based on these criteria and placement processes.

Research Questions

The following research questions were proposed for the study:

1. What were the personal and professional characteristics of teacher educators of agriculture in the United States?
2. What were the head teacher educator perceptions of the important practices in placement of student teachers with a cooperating center and cooperating teacher?
3. What were the teacher educator perceptions of important elements of a cooperating center and a cooperating teacher?
4. What were the personal and professional characteristics of student teachers of agriculture in the United States?
5. What were the student teacher perceptions of their cooperating center and cooperating teacher?
6. What was the quality of the student teaching experience as perceived by student teachers in agricultural education?

7. Was there a relationship between teacher educator perceptions of important elements of student teaching and the quality of the student teacher experience?
8. Was there a relationship between the student teacher perceptions of their cooperating center elements and the quality of their experience?
9. Was there a relationship between the level of importance of student teacher placement methods and the quality of the student teacher experience?

Significance of the Study

The quality of agricultural education programs in the secondary public schools in the United States greatly depended on the effectiveness of the teacher preparation programs and the teachers that these programs produce (McGhee & Cheek, 1989). Entry of student teachers into the agriculture teaching field was important given the demand for the teachers. Camp (2000) stated that there is a growing need for certified agriculture teachers in the United States. Teacher education programs must supply their graduates with up-to-date curriculum and experiences (Burton, 1988). Student teachers must have a satisfying experience in order to retain these prospective teachers in to the agriculture education teaching field (Rome & Moss, 1990). Teacher educators and former student teachers of the teacher education program were helpful in supplying the teacher education program with data used in making improvements, additions, and deletions (Wentling, 1980).

Harlin, Edwards, and Briers (2002) conducted a study of similar nature, but the data collected did not include teacher educator perceptions; only student teacher perceptions of the important elements of the student teaching experience were included. Rather, this particular study sought to determine important elements of student teaching and important practices for placing student teachers on a national scope. In addition, this study also linked student teacher perceptions with teacher educator perceptions. The information gained from the perceptions could be used by teacher education programs in making future decisions about the placement of student teachers with cooperating teachers and schools. Teacher education programs could choose placement criteria based on the teacher educators' and student teachers' ratings of the important elements of the student teaching experience. The student teaching experience, if properly conducted, was extremely important to the student teacher and had an impact on the student teacher's future decision of entering the teaching profession (Conant, 1963).

Definition of Terms

For the purpose of the study, the following terms were defined:

Teacher education: A program of studies and experience to prepare teachers:

1. to meet all requirements for initial licensing;
2. to enable their students to receive learning helpful in society;
3. to teach in a specified time frame enabling all students to learn;
4. to accommodate a range of individual differences;

5. to motivate student and accomplish a wide range of learning objectives;
6. to maintain appropriate professional development growth and success (Denton, Peters, and Savage, 1984).

Supervised Agriculture Experience (SAE): The actual hands-on application of concepts and principles learned in the Agricultural Science classroom. Students are supervised by agricultural education teachers in cooperation with parents, employers, and other adults who assist them in the development and achievement of their educational and career goals (National FFA Organization, 2002).

FFA: The National FFA Organization is dedicated to making a positive difference in the lives of young people by developing their potential for premier leadership, personal growth and career success through agricultural education (National FFA Organization, 2002).

Cooperating Center: The off-campus school or group of schools in which the student teacher conducts his/her student teaching. The school is not controlled or supported by the college. It is often referred to in the literature as the cooperating school (Beamer, 1981).

Cooperating Teacher: A teacher of public school pupils who also directs the work of a student teacher. Often referred to as the supervising teacher or critic teacher (Beamer, 1981).

Student Teacher: A college student who is engaged in the specific experience defined as student teaching (Beamer, 1981).

Theoretical Base for the Study

The theoretical base for the study was derived from a thorough review of the literature. The primary focus of the study was determining the important practices of various agriculture teacher education programs in the United States when placing student teachers and the effectiveness of these programs in providing the student teachers a meaningful, well rounded student teaching experience. In his article *Better Teachers for Our Nation's Schools*, Goodland (1990) stated that very few matters were as important as the quality of the teachers in our nation's schools. Koziol, Minnick, and Sherman (1996) stated that the student teaching experience was widely accepted as one of the most essential and useful components of a teacher education component. Many studies have been performed on the notion of student teaching and aspects dealing with the student teaching experience (Harlin, Edwards, & Briers, 2002; Norris & Larke, 1989; Rome & Moss, 1990). Many researchers had differing views on the procedures used in the placement of student teachers. Cruickshank (1985) contended that student teaching should move from an apprenticeship module to a more professional, rigorous module. Berliner (1985) researched ways to change student teaching through the development of pedagogical laboratories where specific skills could be practiced, criticized, and evaluated.

Assumptions

It was assumed that the instruments used for the study measured the perceptions

of teacher educators and student teachers on important elements of the student teaching experience.

Limitations

The generalizability of the results was limited to the population of teacher education programs and student teachers in the 2001-2002 academic school year. Because a 100% response rate was not obtained, generalizations beyond the population represented by the obtained sample should be cautiously made. Other limitations included the head teacher educators not appropriately distributing the additional teacher educator surveys to the respective faculty and having an influence on the teacher educator's responses. Head teacher educators giving the researcher incorrect and unreliable contact information of the student teachers for the 2001-2002 academic school year was also a limitation to the study.

Delimitations

This particular study was delimited to the responses from 35 of 50 head teacher educators, 46 of 77 teacher educators, and 139 of 204 student teachers in the 2001-2002 academic school year collected from October 12, 2002 to March 10, 2003.

Organization of the Remainder of the Dissertation

Chapter II contains a review of literature for this study. The review of literature examined the following:

1. History and trends of teacher education in agriculture
2. Need for teacher education in agriculture
3. Student teaching as part of a teacher education program in agriculture
4. Cooperating teachers as part of a teacher education program in agriculture
5. Cooperating centers (schools) as part of a teacher education program in agriculture
6. The student teachers' experiences as part of a teacher education program in agriculture.

Chapter III described the methodology and collection of data techniques used to conduct the study. Chapter IV discussed the data analysis and results and findings of the study. Last, Chapter V included a discussion on the summary, conclusions, implications, and recommendations of the study.

CHAPTER II

REVIEW OF LITERATURE

Introduction to Literature Review

The purpose of this study was to determine important elements and placement practices of student teaching as perceived by teacher educators and how well each student teacher perceived his/her quality of experience based on these criteria. A detailed understanding of the history and trends of teacher education in agriculture was deemed necessary to understand fully the various placement procedures and how the important elements of the student teaching experience had evolved over time. This chapter examined the historical perspective of agriculture teacher education programs and the need for teacher education programs centered on agriculture. The conceptual framework that shaped research on student teaching (clinical experiences), cooperating teachers, cooperating centers, and student teacher experiences was also examined. Finally, a description of the correlational research design and research methodology used for this study was described and explained in detail.

History and Trends of Teacher Education in Agriculture

Agriculture has been taught for many years both formally and informally. Agriculture was first taught formally in the United States in 1733 in the State of Georgia (National Research Council, 1988). The National Research Council (1988) indicated

that cultivation methodology and the identification of crops was the sole purpose of the first specialized school of agriculture. Children were taught various methods and scientific principles to be able to farm successfully and sustain a legitimate family income (Moore, 1987). Martin and Berkey (1981) stated, "Some say teacher education began with the Indians teaching the earlier settlers to grow crops, while others cite the philosophy of Booker T. Washington at Tuskegee Institute" (p. 2). Other researchers believed that the development of the land grant university in 1862 was the initial development stage of the teacher education program in the agricultural education discipline (National Research Council, 1995).

Regardless of the mixed opinions of how teacher education in agriculture evolved, most agricultural educators were in agreement on the various legislation that has been passed to provide a framework for the teacher education program in agriculture (Campbell, 1995). The land grant university system established throughout America was one of the most successful educational endeavors in the history of the common man (Campbell, 1995). During this era, most middle class people were involved in a lifestyle directly related to agriculture or industry (National Research Council, 1995). It only made good sense that should a man wish to further his education, he would need to study agriculture, as it was the dominant educational need in the late 1800s. The original intent was for "the Land Grant College of Agriculture to…teach such branches of learning as are related to agriculture and the mechanical arts in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life" (National Research Council, 1995, p. 1).

The history of teacher education in agriculture and its development stages primarily revolved around the passage of the Smith-Hughes Act of 1917 (Martin & Berkey, 1981). In 1912, forty agricultural colleges offered courses that were limited to the preparation of teachers of agriculture (Wiegers, 1981). By the end of 1916-1917, only a mere nineteen colleges were offering courses in agriculture teacher preparation (Martin & Berkey, 1981, p. 5). The agricultural education discipline began to dwindle due to the fact that very few legislative acts had been passed to sustain the agriculture teacher preparation programs in the United States (Hillison, 1987). The period of the early 1900s was the foundation for the conceptual framework of the agricultural teacher education era (Hillison, 1987). The Smith-Hughes Act of 1917 was noted as one of the most influential pieces of legislation that the agricultural education discipline has seen (Camp & Crunkilton, 1985). The act was responsible for the allocation of monies to develop teacher education programs in agriculture (True, 1929). During the period of the early 1900s, many questions involving agriculture and teacher education arose. True (1929) suggested some of these included: What preservice activities should be involved in the preparation of teachers in agriculture? What should be the sole source of teachers of agriculture? Who should be responsible for the preparation of teachers of agriculture?

During this period of rapid advancement of agriculture, public education began its expansion as well. Attendance laws were extended and the school year was lengthened tremendously (Martin & Berkey, 1981). High school enrollment was increasing three-fold and concerns for the "proper function" of secondary education were growing. Saylor (1960) stated that the Commission on the Reorganization of

Secondary Education included a vocational component as one of its Seven Cardinal Principles. Due to this growing concern for the "proper function" of secondary education, President Lincoln signed the Land Grant Act of 1862 (National Research Council, 1995). The act was advanced by Senator Justin Morrill and other leaders to "promote the liberal and practical education of industrial classes in the several professions in life" (Martin & Berkey, 1981, p. 3). Deans and faculty of the college of agriculture began to promote and assist elementary and secondary schools in the incorporation of agricultural education as part of the fundamental curriculum (Stevens & Howell, 1983). In 1906, teacher education in agriculture at the land-grant institutions consisted of only normal courses, summer sessions, and programs in the department of education (Swanson, 1942). Swanson (1942) suggested that by 1910, 46 colleges of agriculture reported teacher training in agriculture, but this was solely inservice in nature, rather than preservice preparation. There still existed no formal training for teachers wishing to pursue and deliver agriculture in the classroom (Swanson, 1942). Not until the passage of the Smith-Hughes Act of 1917 did there exist formal pre-service teacher education programs in agriculture (Stevens & Howell, 1983).

The Smith-Hughes Act of 1917 provided a formal protocol for the training of teachers in agriculture at the secondary school level (National Research Council, 1988). The contents of the Smith-Hughes Act of 1917 required that states that received federal funds provide and allocate some of the resources to the education and training of these teachers of agriculture (True, 1929). Before the Smith-Hughes Act of 1917 there was a shortage of agricultural education teachers due to the limited schools of formal teacher

training (Wiegers, 1981). The Smith-Hughes Act of 1917 quickly reversed the limited number of formal teacher education programs in agriculture and the number of teacher education programs increased three-fold (National Research Council, 1988). Key and Price (1987) stated that the Smith-Hughes Act was a great influence on agricultural education and the development of the foundation for formal training of teachers in agriculture at the Land Grant College.

The Vocational Education Act of 1963 required states to have a written agreement between their state education departments and the local agriculture teacher education programs (Martin & Berkey, 1981). The agreement allowed agriculture teacher education programs to concentrate on preparing teachers who could impact the employment in farming and agribusiness while preparing students for the future teaching profession (Wiegers, 1981). Stevens and Howell (1983) stated that the Vocational Education Act of 1963 provided any amounts allotted for agriculture could be used for vocational education in any occupation involving some sort of agriculture subjects. These changes were made possible by input from local advisory boards, administrators, teacher educators, and teachers (Stevens & Howell, 1983). The newly passed law contained three significant elements. The National Research Council (1988) stated that 1) the funds aimed at federal vocational education were not earmarked for one specific occupational area, 2) vocational agriculture was divided in to specialization areas requiring agriculture teachers to classify their students by specialized codes, and 3) the law placed greater emphasis on special needs and disabled students.

The last piece of legislation that greatly affected teacher education programs in agriculture was the Carl D. Perkins Vocational Education and Applied Technology Act of 1984 (National Research Council, 1988). The legislation presented new challenges for teacher educators in presenting information to future agriculture teachers in addressing special needs and disabled students, adults in need of training, single parents, and criminal offenders in correctional institutes (Case, 1985). The Carl D. Perkins Act provided two main objectives: 1) the improvement of career and technology education programs and 2) better access to career and technology programs for students of special populations (Lynch, 2000). The Perkins Act set aside fifty-seven percent of the federal grants for special needs populations and the other forty-three percent for career and technology program improvement (Lynch, 2000). Lynch (2000) stated that in the late 1990s, the special needs population enrolled in career and technology education programs and agriculture courses increased due to regular education students opting out of career and technology education to take more academic core curriculum courses. In addition to the original 1984 Carl D. Perkins Act, two other revisions of the Act occurred in 1990 and 1998. These two revisions mandated the use of federal funds for the improvement of academic achievement and student performance (Case, 1985). Teacher education programs in agriculture were responsible for ensuring that future agriculture teachers were competent and understood the revisions and guidelines of the legislation of the Carl D. Perkins Act of 1984 and the revisions made in 1990 and 1998 (National Research Council, 1988).

The Need for Teacher Education in Agriculture

Many have questioned the need for teacher education programs to prepare future agriculture teachers. Questions such as "Why don't we just put them in the classroom and let them fiend for themselves?," suggested that teacher education was unimportant to the success of future teachers. Cox and McCormick (1978) pointed out that the background and experience of future agriculture teachers has changed dramatically in the past years. Many teacher educators had seen that undergraduate students with an agriculture background enrolled in the teacher education program were the minority (National Research Council, 1988). Most had not experienced the life on a farm and were not familiar with any aspect related to agriculture (Cox & McCormick, 1978). This notion supported the need for having a set agenda for future agriculture teachers entering an agriculture teacher education program.

Agricultural education began to implement more technology in the classroom to accommodate those students coming from a non-traditional agriculture background (National Research Council, 1988). Vocational agriculture also incorporated the science and biology of living organisms. By the 1960s, production agriculture was decreasing and the more scientific approach to agriculture was in growing demand (Nelson, 1981). Technologies, such as biotechnology, Internet, email, and distance education, provided more access to knowledge for those secondary students (Naisbett & Aburdene, 1990). The agriculture field was highly technological and future agriculture teachers needed to be prepared for teaching this particular curriculum (National Research Council, 1988).

Nelson (1981) stated that agriculture teachers had more duties than just teaching the curriculum in the classroom. For example, activities such as supervision in the classroom laboratory, agriculture mechanics laboratory, and out-of-school supervision of agricultural experiences were just a few to mention (Deeds, Flowers, & Arrington, 1991). As mentioned by Cox and McCormick (1978), teacher education in agriculture must be kept available to those students interested in pursuing a teaching degree that compliments the agriculture curriculum. Agriculture was continuously changing and becoming highly technical in nature. It was the responsibility of the teacher education program to keep up to date and supply its graduates with relevant information that the students could disseminate in their future secondary classroom (Camp & Bailey, 1999).

Student Teaching as Part of a Teacher Education Program in Agriculture

The student teaching experience had historically been the mainstay of the teacher education program (Berkey, 1981). The notion of "learning by doing," promoted by John Dewey (1916), was the theoretical base surrounding the teaching experience. Devor (1964) stated that student teaching was often defined as providing students with laboratory training for the testing of ideas, opportunities for professional growth, and an experience that was most closely related to reality of a true secondary classroom. Conant (1963) stated that academic professors were in complete agreement on one point: that student teaching, if properly conducted, was extremely important to the student teacher. Conant (1963) also stated that even though these academic professors were in

complete agreement on this particular issue, there was little agreement on the knowledge and curriculum that they were expected to present to the future teacher. Burstein (1988) stated, "To maximize the student teaching experience, universities needed to determine what activities were important in preparing a student teacher, provide opportunities for such activities, and monitor the activities to ensure quality student teacher training" (p. 16).

Historically, the National Council for Accreditation of Teacher Education stressed the need for professional laboratory experiences intertwined with the local teacher education program (National Council for Accreditation of Teacher Education [NCATE], 1960). The organization stated that student teaching should provide a wide range of professional activities. These activities should be provided in a way that ensures the highest contribution to the learning of these future agriculture education teachers. At the secondary level, records of the earliest student teaching consisted of cooperative arrangements with classes and teachers of specific curriculum and subjects, such as Latin, botany, and mathematics (Andrews, 1966). Until 1920, student teaching was a vocationally-oriented course required in the elementary curriculum, but was limited in the secondary education curriculum (Martin & Berkey, 1981). Andrews (1966) stated that few universities offered student teaching in the secondary education curriculum as credit hours. Legislation in 1920-1940 adopted student teaching into the curriculum of most four-year colleges and universities (Andrews, 1966). The Flowers Report, published in the 1940s greatly influenced student teaching programs. Henry (1989) described the elements that promoted the development of teacher education

programs and what is known today as the Flowers Report. Henry (1989) stated that some of these elements included

1. A series of laboratory experiences designed to help the students participate and study the activities of today's teacher.
2. Laboratory experiences prior to student teaching.
3. Student teaching in setting other than those in laboratory schools.
4. Supervision of the student teaching experience by full-time college professors and public school supervisors.
5. An internship, providing continuity between preservice and inservice education.

Today, teacher education programs implement some or all of these elements (Norris & Larke, 1989). The National Council for Accreditation of Teacher Education (NCATE) expected and evaluated each education unit and school partner to design and implement field and clinical experiences so that students had the opportunity to develop and demonstrate the knowledge and skills of a future teacher (NCATE, 2002, Standard #3).

There have been mixed emotions in the early research of student teaching at the teacher education program. Many questions were asked such, "Was student teaching really the answer for training on a future teacher?" and "what should be the duration in time of student teaching?" (Borne & Moss, 1988). Many research opportunities had taken place to try to answer these difficult questions. John Dewey, the educational philosopher, culminated that "learning by doing" was the conceptual framework for student teaching (Stevens & Howell, 1983). Sears, Marshall, and Wilborn (1994) stated

that student teaching was the point that students were able to put into effect the educational theories and learning theories that they had learned in their previous year's undergraduate work. The student teaching experience allowed the student teacher constant feedback from the university supervisor and cooperating teacher whose classroom they were practice teaching (Koehler, 1986). Additionally, Koziol, Minnick, and Sherman (1996) stated that student teaching was widely accepted as the most essential and useful component in the teacher education program.

On the other hand, many perceived student teaching as a waste of time and ineffective in the training of future teachers. Cruickshank (1985) stated that student teaching was only effective in the training of teaching craftspersons, such as teaching aides and paraprofessional individuals. Cruickshank (1985) proposed that a future teacher needed frequent feedback mechanisms from various instructors and professionals in the field. His argument stated that the traditional student teaching mechanism was ineffective in giving the constant feedback previously discussed because student teachers were subjected to an uncontrolled public school setting (Cruickshank, 1985). The reseacher contended that student teaching should move from the previous apprenticeship module to a more professional, rigorous module. In addition to Cruickshank (1985), Berliner (1985) was also critical of the student teaching component of the teacher education program. He stated that student teaching was ineffective in the development of analytical skills in the prospective teacher and that it retarded the professionalism of teaching (Berliner, 1985). To solve this problem, Berliner (1985) suggested changing student teaching through the development of pedagogical laboratories where specific

skills could be practiced, criticized, and evaluated. This notion would control the setting that each student teacher was subjected to and provide greater direction for the future prospective teacher.

Others who criticized student teaching included Smith and Souviney (1997). The two researchers stated that during student teaching, students were unable to experience the entire phases of the school year. Cooperating teachers often did not teach a full day of courses, and when they did teach, student teachers could not implement their own ideas in the classroom. The student teachers had to adopt the ideas and curriculum innovations of the teacher who was supervising them during the duration of the student teaching experience (Smith & Souviney, 1997).

Many teacher education programs had different criteria and rules for student teaching. One of these included the amount of time a student teacher should be subjected to practice teaching at a particular public school. Hutchinson (1961) conducted a national student teaching survey that characterized student teaching to be 3 weeks to 48 weeks in duration. Later, Kirts and Claycomb (1981) researched this issue and found that from a national perspective, student teaching lasted approximately 6 to 18 weeks. In a more recent study, Borne and Moss (1988) found that the median length of student teaching was approximately 8 weeks with a mean of 9.4 weeks. Eighty percent of the respondents completed less than 12 weeks of student teaching. Borne and Moss (1988) also assessed opinions of how long student teaching should last; they found a range of 6 to 36 weeks with mean of 12.79 weeks. They also found that teacher education programs in the United States were not consistent in the length of time a

student teacher practices teaching in his/her cooperating school. Kirts and Claycomb (1981) showed that student teaching lasted from 6 to 18 weeks with opinions being that student teachers should teach at least 12 weeks.

Student teaching was provided to students who were preparing to teach agricultural education at the secondary level, for the same reason it was provided to those students wishing to teach in other curriculum areas (Beamer, 1981). The student teaching activities in each teacher education program may have varied, but the objectives and reasons for student teaching were consistent. Beamer (1981) stated that student teaching allowed prospective teachers to apply the principles, practices, skills, and concepts to the actual classroom while trying to grow professionally in the agricultural education teaching field.

Cooperating Teachers as Part of a Teacher Education Program in Agriculture

Deeds, Arrington, and Flowers (1988) stated that many researchers have argued that the cooperating teacher was one of the two most important entities in the structure of the teacher education program. Numerous studies regarding the selection of a cooperating teacher to place an agricultural education student teacher have been performed (Deeds, Arrington, & Flowers, 1988; Deeds Flowers, & Arrington, 1991; Norris & Larke, 1989). These studies were conducted because there had been a consensus among researchers about how much a cooperating teacher effected the overall satisfaction of the student teacher's experience (Deeds, Flowers, & Arrington, 1991).

Based on the study by Camp and Bailey (1999), cooperating teachers were selected on a variety of criteria, most of these on the part of the teacher education program. The researchers stated that some of the most important duties of a cooperating teacher included supervising, guiding, evaluating, and counseling the student teacher. Cooperating teachers usually gave student teachers considerable feedback on the curriculum, but little or no feedback on teaching methodology (Abel, Ansel, Hauwiller, & Sparapani, 1986).

Sometimes, the roles of the cooperating teachers were unclear and misunderstood. Deeds, Arrington, and Flowers (1988) reported that cooperating teachers felt that they seldom needed to review daily lesson plans of student teachers. With this in mind, the researchers questioned if the selected cooperating teachers were fulfilling the requirements of the teacher education program, or if they were treating the student teacher as another full-time employee to decrease workload.

The selection of the supervising or cooperating teacher was an important issue to teacher education programs in agriculture for many years. Andrews (1966) stated that over the years, many researchers had contended that any effective teacher could become a good cooperating teacher for a student teacher. Experience of teacher education programs in the recent years had proven this statement incorrect (Norris & Larke, 1989). The burning question of first-time cooperating teachers in a public school was, “What is expected of me by the teacher education program and student teacher?” (Andrews, 1966). Abel, Ansel, Hauwiller, and Sparapani (1986) stated that new supervising or cooperating teachers should be selected on several qualifications or criteria. These

included competency in technical curriculum, years of experience in teaching, skill in teaching in-school and out-of-school classes, educational philosophy, leadership ability, and philosophy of teacher training. Norris and Larke (1989) found in their comprehensive literature review the most commonly mentioned qualities that supervising (cooperating) teachers should possess. These included

1. A willingness to devote time to the student teacher's needs.
2. A demonstrated interest in professional improvement.
3. Effectiveness in the motivation of students proven by high enrollment levels and participation in the local FFA program.
4. A basic understanding of the university's teacher education program in agriculture
5. Demonstration of being well organized and responsible individual.
6. A personal philosophy of teacher education that is consistent with the local teacher education program in agriculture.

Norris and Larke (1989) determined that the ideal cooperating teacher should have a master's degree and be identified as an opinion leader in the local community. All head teacher educators in the United States were surveyed, and the results indicated that the cooperating teachers should display some level of professional growth in the duration of the supervising duties (Norris & Larke, 1989). The teacher educators also believed that the cooperating teachers should have taught for at least three years in the local school district and have a minimum of five years total teaching tenure (Norris & Larke, 1989). A summary of the study indicated that teacher educators had higher

expectations toward the characteristics of cooperating teachers than was the actual practice.

The role of cooperating teachers has been an important issue that has been faced by teacher education programs in the past. Today, cooperating teachers were unclear, still, as to what their role was with the student teacher (Deeds, Flowers, & Arrington, 1991). A short definition of the role of cooperating teachers was developed by Norris and Larke (1989). The researchers stated that the role of the cooperating teacher was to:

1. Help the beginning teacher find a purpose in learning.
2. Further the beginning teacher's knowledge to differences in individuals and the dynamics of the classroom.
3. Give the student teacher a view of teaching as learning.
4. Influence the student teacher to act professionally.

Teacher education programs in agriculture operated through the use of student teacher handbooks and manuals. Deeds, Arrington, and Flowers (1988) stated that these tools assisted the cooperating teachers by providing them with clear expectations and instructions in supervising a student teacher, but most of the time the cooperating teacher had no input in the development of these tools. Lelle and Kotrlik (1987), in their study on the opinions of vocational agriculture teachers toward state supervision, found that practicing agriculture teachers had little opportunity for input in teacher education policies and expectations (Deeds, Flowers, & Arrington, 1991). Cooperating teachers played an enormous part in the overall student teaching experience (Rome & Moss, 1990). In fact, many teacher educators have stated that the cooperating teacher was one

of the two most important entities in the structure of the teacher education program (Deeds, Arrington, & Flowers, 1988). Byler and Byler (1984) found that the cooperating teacher became important because the student teacher looked at the cooperating teacher as a mentor and began to build a strong rapport with him/her early in the student teaching experience. Changes in student teacher attitudes, professionalism, and teaching began to take affect in the student teacher early in his/her student teaching experience due to the guidance and direction of the assigned cooperating teacher (Byler & Byler, 1984).

Cooperating Centers (Schools) as Part of a Teacher Education Program in Agriculture

Cooperating centers (schools) have become an important issue to teacher education programs in agriculture when the time has arrived to pair student teachers with both schools and teachers. Hopkins and Moore (1993) have defined a cooperating center as "a public or private school that is not controlled or supported by a higher education institution, but provides opportunities and facilities for professional student teaching experiences in a teacher education program" (p. 5). Far too often, models placing student teachers with cooperating schools and teachers were developed out of mere convenience for the supervising teachers, as well as the student teacher (Guyton & McIntyre, 1990). Patterson, Michelli, and Pacheco (1999) stated that better schools create better teachers and better teacher education programs. The researchers also

communicated that despite recognition of a school, not all school experience was educative and that little research had been conducted to establish an effective model for the delivery of field experience programs. There was a growing need for research in the area of choosing effective cooperating schools to provide the best and most effective experience for the practicing student teacher (Bullough, Young, Erickson, Birrell, Clark, & Egan, 2002).

Originally, student teaching sites were referred to as laboratory schools. A laboratory school was defined as "a school, whether it be on the university campus or not, in which the operation, curriculum, functions or selection of staff, or any combination of these, are controlled wholly or in part by the college" (Andrews, 1966, p.11). Andrews (1966) indicated that these laboratory schools were in most part private, nonpublic schools operated in a joint effort by the institution of higher education and the local school system. Andrews (1966) stated that the original intent of these schools was to act as a laboratory for practice teaching, for observation of classes, and for experimentation/program development and research.

Today, sites where teacher education programs in agriculture place student teachers are often referred to as cooperating centers or schools. Andrews (1966) defined a cooperating school as "a school or school system which provided facilities for professional laboratory experiences for college students, but which was neither controlled or supported by the institution of higher education" (p.11). The institution of higher education's teacher education program usually had a written agreement with the cooperating school stating activities and responsibilities of both the cooperating teacher

and the student teacher (Borne & Moss, 1988). Borne and Moss (1988) also stated that expectations of both the cooperating school and student teacher were written in contract form to abide by throughout the entire semester.

The Report of the K-16 Teacher Education Task Force (2000), authored by the American Federation of Teachers, stated that student teachers were often placed at cooperating schools for convenience. Academic excellence of the cooperating school was disregarded, and the convenience of being close to the campus or the student's home and willingness of the cooperating school to participate overwhelmed the decision of program directors of the particular teacher education program to the usage of that particular cooperating school (American Federation of Teachers, 2000). Deeds and Barrick (1986, p. 2) performed research which answered the question "What should a cooperating school and teacher possess to allow a student teacher the best experience?" The researchers reported that high quality programs might be associated with excellent instructional programs, facilities, and equipment that were in good working order, and a supervised agricultural experience program where students and parents were active in both the school and the community. These particular characteristics were stated and recommended for use in the future selection of cooperating schools to instill a more positive attitude toward the profession (Deeds & Barrick, 1986). In addition to these characteristics, Norris and Larke (1989) found that those who were involved in the teacher education program tended to agree on these qualities as well:

1. Percent of students completing the agriculture program and the percent that entered the particular field.

2. A well-rounded and balanced curriculum offered.
3. Adult programs that involve the community and others within driving distance.

Norris and Larke (1989) also found that teacher educators wanted the cooperating schools to have a record of outstanding accomplishments and be ranked above other secondary agriculture departments. The researchers found that local school administration should be supportive of the agriculture program and the extracurricular FFA activities should be numerous and effective. The researchers stated that the cooperating center should be selected based on the scope and number of courses offered and assigned no more than one student teacher per cooperating teacher (Norris & Larke, 1989).

Historical perspectives have proved that cooperating schools have evolved from on-campus laboratories in the traditional sense. The off-campus center seemed to provide a more effective training environment than did the campus laboratory school (Beamer, 1981). Beamer (1981) also stated that it was much easier to develop the criteria for the selection of the cooperating school than it was to find a school to meet all of those developed criteria. It was, indeed, the responsibility of the teacher education program in agriculture to select student teaching centers. The teacher trainers were also encouraged to solicit the help of supervisors of vocational agriculture, public school administrators, and others in the selection of these cooperating schools (Marvin, 1981).

The Student Teachers' Experiences as Part of the Teacher Education Program in Agriculture

Student teaching is a tool used by teacher education programs that enables students to get a hands-on approach to actually teaching a class of students. Student teaching has been used for many years. In the historical days, student teaching was done at the university (Marvin, 1981). Mock classrooms and laboratories were set up for the students to get a first-hand experience in an actual teaching situation. Berkey (1981) indicated that teacher education programs began to use local public schools with actual teachers and students after the use of the mock classrooms. The researcher also suggested that student teachers were apt to get a better experience in a real situation (Berkey, 1981).

Satisfaction of the student teacher with his/her experience has remained important in the field of agricultural education. With the demand of agricultural education teachers at the secondary level high, and the supply decreasing, it was important to retain students in the teaching field (Camp, 2000). Satisfaction of the student teaching experience was an important aspect of retention to the profession. Boerne and Moss (1988) studied student teacher's self-perceived level of preparation and concluded that first year teachers rated their level of preparation of teaching as acceptable. The researchers also found that specific teaching duties and educational goals improved as a result of student teaching (Borne & Moss, 1988). Rome and Moss (1990) found that student teachers strongly agreed that student teaching was a positive

experience and strongly disagreed that student teaching was of little or no value to the teacher education program. It was found that teachers were undecided on whether or not student teaching was a realistic example of actual teaching. Harlin, Edwards, and Briers (2002) examined the student teachers' perceptions of important elements of the student teaching experience before and after the actual experience. The importance declined in all of the specific core areas (Classroom and Laboratory Instruction, SAEP, Student Leadership Development, School and Community Relationships, and Cooperating Teacher - Student Teacher Relationships) perhaps due to the student teachers experiencing the actual teaching experience. Though all elements were rated as important by student teachers, a negative change was seen in the Supervised Agricultural Education Program and Classroom and Laboratory Instruction (Harlin, Edwards, & Briers, 2002). The researchers found that student teachers recognized the importance of the cooperating teacher – student teacher relationship both before and after the student teaching experience (Harlin, Edwards, & Briers, 2002). Harlin, Edwards, and Briers (2002) stated that this was further evidence supporting the need for the "concrete" student teaching experiences afforded by student teaching – experiences that assist novice teachers in developing their professional behaviors.

CHAPTER III

METHODS AND PROCEDURES

The purposes of this study were to determine important elements of student teaching as perceived by teacher educators and to determine the important practices for placing student teachers with cooperating schools and teachers. The study also assessed how well each student teacher perceived his/her quality of experience based on these criteria and placement processes. The study was conducted quantitatively using a correlational research design. The correlational research method was useful for studying problems in education and other social sciences. One of the major advantages of this design was that it permitted researchers to analyze relationships among a large number of variables that existed in a single study (Gall, Borg, & Gall, 1996). The degree of relationship between the variables being studied was easily assessed when using correlational statistics. Predictions of scores on one variable could be made from subject's scores on other variables. Research questions addressed included:

1. What were the personal and professional characteristics of teacher educators of agriculture in the United States?
2. What were the head teacher educator perceptions of the important practices in placement of student teachers with a cooperating center and cooperating teacher?
3. What were the teacher educator perceptions of important elements of a cooperating center and a cooperating teacher?

4. What were the personal and professional characteristics of student teachers of agriculture in the United States?
5. What were the student teacher perceptions of their cooperating center and cooperating teacher?
6. What was the quality of the student teaching experience as perceived by student teachers in agricultural education?
7. Was there a relationship between teacher educator perceptions of important elements of student teaching and the quality of the student teacher experience?
8. Was there a relationship between the student teacher perceptions of their cooperating center elements and the quality of their experience?
9. Was there a relationship between the level of importance of student teacher placement methods and the quality of the student teacher experience?

Research Design

The research was *ex post facto* in nature due to the fact that the causes were studied after the student teaching experience. All student teachers surveyed had completed the student teaching experience in the 2001-2002 academic school year. The correlational design was effective in assessing the student teaching placement method and perceptions of characteristics and criteria for cooperating centers and teachers, and their direct relationships with the quality of the student teacher's experience. The

research design attempted to detect relationships between the independent variables, the important practices for placing student teachers with cooperating schools and teachers, teacher educator and student teacher perceptions, and the dependent variable, the student teaching experience, as well as, the quality of the experience of student teachers.

Population and Sample

The target population of this study consisted agriculture teacher preparation programs in the United States. For each program, data were sought from practicing head teacher educators and teacher educators in the United States as defined by the 2002 American Association for Agricultural Education (AAAE) directory (Dyer, 2002). There were 88 teacher education programs as of August 19, 2002 according to the AAAE directory. A simple random sample approach was used to select 50 of the 88 agriculture teacher education programs as defined by the American Association for Agricultural Education (AAAE) directory. Two subgroups from each teacher education program were used. The first subgroup consisted of recent graduates of the teacher education program in the 2001-2002 academic school year. The second subgroup consisted of: 1) head teacher educators at each institution, and 2) faculty with responsibilities in the student teacher placement or supervisory process ("teacher educators").

Instrumentation

Three different mail questionnaires were used for head teacher educators, faculty participating in teacher education activities, and recent graduates of the program. The head teacher educator survey attempted to assess the important practices of placing student teachers with cooperating schools and teachers and the head teacher educator perceptions of the important characteristics and criteria when choosing a cooperating school and teacher. The second teacher educator survey was directed toward those faculty members who work with student teachers on a regular basis. Student teacher placement methods were not contained in this particular survey; however, the instrument did contain the rating of important elements of the cooperating school and teacher. Multiple copies were sent to the department head of each school. It was the duty of the department head to "administer" the instrument to the appropriate faculty and staff who were associated with student teachers. The head teacher educator filled out the survey that described the important practices of placing student teachers; the survey also asked for his/her perceptions of important elements of the cooperating school and teacher. The other faculty involved in the teacher education program answered those questions pertaining to important elements of the cooperating center and teacher. If the school did not have any student teachers in the 2001-2002 school year, the instrument was not used. If the school had student teachers in the 2001-2002 academic school year, the head teacher educator was asked for a list of those student teachers' names, telephone numbers, and addresses. Thus, student teachers and teacher educators were stratified in the teacher education program. After responses from the teacher education surveys were

received, the student teachers' names and contact information were determined. The student teacher survey attempted to discover the student teacher's overall experience in regard to similar constructs contained in the Local Program of Success Guide maintained by National FFA: 1) Classroom and Laboratory Instruction, 2) Supervised Agriculture Experience Program, 3) Student Leadership Development, 4) School and Community Relationships, and 5) Cooperating Teacher and Student Teacher Relationships (National FFA Organization, 2003). Each student teacher survey was coded as to the university or college from which the respondent graduated. A composite student teacher perception from each university was then compared to composite teacher educator responses of important elements and placement methods from the same college or university.

Pilot Test

Both the head teacher educator and teacher educator instruments were pilot tested in October 2002 with the Agricultural Science Teaching Workgroup at Texas A&M University. The researcher prepared the information packet and delivered via mail to the respective participants. None of these agricultural educators were a part of the sample. Additionally, the student teacher instrument was tested using graduates of the Agricultural Science Teaching program at Texas A&M University, all of whom were current graduate students in the program. Participants were contacted through graduate courses and asked to fill out the instrument.

Both groups of participants were asked to fill out the survey, usually taking 10-15 minutes, and were encouraged to write comments or give suggestions for improving the instrument. The results of the pilot study indicated that the researcher make the necessary changes for improved readability of the instruments. Many suggestions were made to improve the response and clarity of each item assessed. Cronbach's coefficient alpha was calculated to provide internal consistency of the instrument. The reliabilities for scales relating to the cooperating center on the head teacher educator and the teacher educator instrument ranged from (.67) to (.75). On the same instrument, the reliability for the scale of the cooperating teacher was (.98). On the student teacher instrument reliabilities consisted of the facilities items (.43), classroom and laboratory instruction (.77), supervised agricultural experience program (.82), student leadership development (.88), school and community relationships (.81), cooperating teacher and student teacher relationships (.95), and overall student teaching experience (.89).

The results of the pilot study and the expertise of the researcher's graduate committee were used to finalize the instruments (Appendices A, C, and E). The head teacher educator instrument was printed on blue 8 ½" X 11" paper and the additional teacher educator instrument was printed on white 8 ½" X 11" paper. The student teacher instrument was printed on buckskin 8 ½" X 11" paper. The final instruments were printed on front and back and consisted of a cover page, cover letter, two pages of demographic questions, and three pages of Likert Scale questions (See Appendices A – F).

Collection of Data

On October 14, 2002, each teacher education program selected to participate was contacted via phone. The researcher purchased a pre-paid phone card and attempted to contact those head teacher educators of interest. Phone calls were made to determine how many teacher educator instruments to send in the research packet. The researcher asked the head teacher educator how many other agriculture teacher educators were employed at their particular university. After the number of instruments to send to each teacher education program packet was determined, it was recorded and set aside until all fifty teacher education programs responded to the phone call. The number of instruments in each packet ranged from just one head teacher educator instrument to one head teacher educator instrument and six other teacher education faculty instruments.

After determining how many instruments to send in each packet, the researcher prepared and mailed fifty teacher education programs a packet on October 18, 2002. A total of 49 head teacher educators and 77 other teacher education faculties were ultimately assessed. From the 50 teacher education programs in the sample, one particular school no longer had a teacher education program in the agricultural education department, so this particular school was disregarded from the study. Each of the teacher educators' packets contained a cover letter to the head teacher educator and each teacher educator. The head teacher educator cover letter explained instructions for distribution to the other teacher education faculty and instructions for filling out the instrument. The instruments were color-coded, with a blue packet sent to the head teacher educators and a white packet sent to the other teacher educators. The only

difference between the two instruments was an additional section on the head teacher educator instrument. This additional section assessed the important practices used to place student teachers with cooperating schools and teachers. Also, the head teacher educator was asked to supply names of those students who student taught in the 2001 – 2002 academic school year (Fall 2001 through Summer 2002).

By November 11, 2002, 21 head teacher educator surveys were received and 37 teacher educator surveys were received. On November 14, 2002, a follow-up email was sent and a second mailing of the instruments to those who had not responded. The purpose of the email was to inform those teacher educators that a survey packet had been mailed and to request their assistance in completing and returning the head teacher educator survey or teacher educator survey. Contact information for the researcher was included in the email in case the teacher educator had any questions or concerns. By November 25, 2002, 15 more head teacher educator surveys were received, along with 9 other teacher educator surveys.

The final deadline date for the response of head teacher educators and teacher educators was set for December 15, 2002. The instruments from 35 of 49 head teacher educators were received for a response rate of 71.4% while the instruments from 46 of 77 teacher educators were received for a response rate of 60.0%. A total of 39 of the 50 teacher education programs responded, yielding a response rate of 78%.

After receiving the head teacher educators' instruments, the researcher inputted the student teacher contact information into a database to proceed with the second phase of the study. A total of 204 student teacher names and addresses were received from

head teacher educators. Survey packets were prepared and included a cover letter explaining the study and giving the former student teachers directions for filling out the survey (Appendix E). A business reply envelope was also included in the packet. The student teacher instrument was mailed January 17, 2003. By February 7, 2003, a total of 109 out of 204 student teachers responded for a response rate of 53%. On February 10, 2003, a second mailing of the instrument was distributed to those non-respondents. The deadline for the instrument was March 10, 2003. By March 10, 2003, the researcher had received a total of 20 additional instruments to raise the response rate to 140 out of 204 student teachers or 69%. To account for nonresponse error, the researcher randomly selected 31 student teachers that did not respond to the instrument. Each of the 31 student teachers were called and asked a series of questions regarding gender, age, ethnicity, and other demographical questions to compare to those demographical questions of the respondents. The researcher decided to contact 31 of the non-respondents according to Gall, Borg, & Gall (1996). They suggested that after the appropriate follow-up procedures have been carried out, if a response rate of less than 80% was achieved, a random sample of at least 20 participants should be contacted ("double-dipped"). For the study, 31 participants were contacted via a telephone call. Respondents and non-respondents were compared using a chi-square test for all the demographic questions other than that of age. For the age question, an independent samples t-test was used to determine if there were differences between respondents and nonrespondents. This information is presented in Table 1 through Table 7.

Table 1

Respondents Versus Nonrespondents Regarding Student Teachers' Gender

	Male	**Female**	**Chi Square**	**Sig.**
Respondents	61	79	.663	.415
Nonrespondents	16	15		

Table 2

Respondents Versus Nonrespondents (Using t-test statistic) Regarding Student Teachers' Age

	N	**Mean**	**SD**	***t***	**Sig.**
Respondents	140	24.19	3.09	.377	.707
Nonrespondents	31	23.97	1.94		

Table 3

Respondents Versus Nonrespondents Regarding Student Teachers' Ethnicity

	African American	**Hispanic**	**Pacific Islander**	**White**	**Other**	**Chi-Square**	**Sig.**
Respondents	1	2	1	135	1	6.670	.154
Non-respondents	0	3	0	28	0		

Table 4

Respondents Versus Nonrespondents Regarding Student Teachers' Current Job

	Teaching Agricultural Education	Grad. Sch.	Working Outside Ag.	Un-emp.	Teach Other Sub.	Ag. Ind.	Other	Chi-Square	Sig.
Respondents	106	7	2	3	7	5	10	8.439	.210
Non - respondents	21	3	2	1	1	3	0		

Table 5

Respondents Versus Nonrespondents Regarding Student Teachers' Plans for Additional Certification

	No Other Cert.	Composite Science	Life-Earth Science	Biology	Areas Outside Science	Chi-Square	Sig.
Respondents	79	10	10	22	19	4.243	.374
Non-respondents	18	5	3	3	2		

Table 6

Respondents Versus Nonrespondents Regarding Student Teachers' Plans for Years of Teaching Agriculture

	No Plans For Teaching Ag.	1 – 2 Years	3 – 5 Years	6 – 10 Years	11 or More Years	Chi-Square	Sig.
Respondents	16	10	23	22	66	6.696	.153
Non-respondents	2	0	6	10	13		

Table 7

Respondents Versus Nonrespondents Regarding Student Teachers' School Size

	500 or Fewer Students	501 – 900 Students	901 – 1200 Students	1200 or More Students	Chi-Square	Sig.
Respondents	53	48	13	25	5.368	.147
Non-respondents	13	7	7	4		

From the above tables, the researcher concluded that there were no statistically significant differences in any of the demographic questions. Therefore, respondents did not differ from nonrespondents, and the responding sample was deemed to be representative of the population of student teachers in agriculture.

Data Analysis

SPSS 10.0 for Windows software was used for data analysis. Descriptive statistics were used to familiarize the reader with the demographics of the teacher educators and the student teachers. Frequencies, percentages, measures of central tendency, and variability were all used to fully describe the data that were collected by the researcher. Rankings were used to determine the importance of student teaching elements as perceived by teacher educators and student teachers.

Cronbach's alpha was used to determine the reliability of each scale of the instrument. If a certain item decreased the alpha, it was eliminated to increase the final alpha. After the highest Cronbach's alpha was achieved, each section was compiled in to a composite mean for each teacher educator and student teacher. The individual means were then aggregated to form a school mean. These aggregated means were used to determine the relationships of the important elements of student teaching and the overall student teaching experience. Pearson's Product Moment Correlation was used to determine the *r* and *p* value of each set of variables. Confidence intervals and tests for statistical significance were set *a priori* at the .05 level. Each test and details of the analysis were elaborated in the results discussion in Chapter IV.

CHAPTER IV

FINDINGS AND DISCUSSION

There were two purposes of the study. The first purpose was to determine important elements of student teaching as perceived by teacher educators and to determine the important practices for placing student teachers with cooperating schools and cooperating teachers. The second purpose of the study was then to determine student teacher perceptions of the quality of experience.

The following research questions were proposed for the study:

1. What were the personal and professional characteristics of teacher educators of agriculture in the United States?
2. What were head teacher educators' perceptions of the important practices in placement of student teachers with a cooperating center and cooperating teacher?
3. What were head teacher educators' and teacher educators' perceptions of important elements of a cooperating center and a cooperating teacher?
4. What were the personal and professional characteristics of student teachers of agriculture in the United States?
5. What were student teacher perceptions of their cooperating center and cooperating teacher?
6. What was the quality of the student teaching experience as perceived by student teachers in agricultural education?

7. Was there a relationship between teacher educator perceptions of important elements of student teaching and the quality of the student teacher experience?
8. Was there a relationship between the student teacher perceptions of their cooperating center elements and the quality of their experience?
9. Was there a relationship between the level of importance of student teacher placement methods and the quality of the student teacher experience?

The research questions of this study served as a guide for presenting the findings of the study. Information regarding each research question was presented in separate sections.

Findings Related to Research Question One

A description of the demographics of participants was deemed necessary to get a snapshot of the population. The methodology consisted of a survey designed to assess the perceptions of head teacher educators, teacher educators, and student teachers from the 50 randomly selected university teacher education programs. As shown in Table 8, both head teacher educator and teacher educator groups consisted of a large majority of males. The sample of the head teacher educators consisted of 91% males and 9% females, while the teacher educator group consisted of 88% males and 11% females.

The sample consisted of a mixture of African-American, Hispanic, Native-American, and Anglo head teacher educators and teacher educators. As shown in Table

9, an overwhelmingly majority (82.8%) of the head teacher educators were Anglo, similar to the ethnicity of the teacher educators who were (91.1%) Anglo. Five head teacher educators (14.2%) and 2 teacher educators (4.4%) were African-American. The demographic data showed that 1 head teacher educator (2.8%) and 1 teacher educator (2.2%) were Hispanic. Additionally, 1 teacher educator (2.2%) was Native-American / Alaskan.

Table 8

Gender of Head Teacher Educators and Teacher Educators

	Gender			
	Male		Female	
Position	**n**	**(%)**	**n**	**(%)**
Head Teacher Educator	32	91	3	9
Teacher Educator	40	89	5	11
Overall	72	90	8	10

Table 9

Ethnicity of Head Teacher Educators and Teacher Educators

	Race / Ethnicity							
	African-American		Anglo		Hispanic		Native-American / Alaskan	
Position	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
Head Teacher Educators	5	14.2	29	82.8	1	2.8	0	0
Teacher Educators	2	4.4	41	91.1	1	2.2	1	2.20
Overall	7	8.75	70	87.5	2	2.5	1	1.25

Table 10 displays the professorial rank of the head teacher educators and teacher educators who responded to the instrument. Of the 34 head teacher educators, 17 (50%) were classified in the professor rank, while 15 (33.3%) of the teacher educators were classified at that rank. Twenty three percent of the head teacher educators were reported as assistant professors, with 28.8% of the teacher educators as assistant professors. The associate professor rank was held by 8 head teacher educators (23.5%) and by 13 teacher educators (28.8%). One of the 34 (2.9%) head teacher educators was classified as an Instructor/Lecturer while 5 of the 45 (11.1%) teacher educators were classified at the same level.

Table 10

Professorial Ranking of Head Teacher Educators and Teacher Educators

	Professorial Ranking							
	Instructor/ Lecturer		**Associate Professor**		**Assistant Professor**		**Professor**	
Position	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
Head Teacher Educators	1	2.9	8	23.5	8	23.5	17	50.0
Teacher Educators	5	11.1	13	28.8	13	28.8	15	33.3
Overall	6	7.5	21	26.3	21	26.3	32	40.0

Table 11 indicates the tenure status of both head teacher educators and teacher educators.

Table 11

Tenure Status of Head Teacher Educators and Teacher Educators

	Tenured		Not Tenured, but tenure track		Not tenure track	
Position	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
Head Teacher Educators	26	74.3	7	20.0	2	5.70
Teacher Educators	28	62.2	12	26.7	5	11.10
Overall	54	67.5	19	23.8	7	8.75

A majority of head teacher educators (74.3%) and teacher educators (62.2%) were of tenure status. Seven of 35 (20%) head teacher educators and 12 of 45 (26.7%) teacher educators were not tenured, but were on the tenure track. A small number of non-tenured faculty responded to the instrument. Those head teacher educators who were not on tenure track option included 5.7% of the sample and teacher educators included 11.1%.

The data in Table 12 illustrate the highest degree earned by the head teacher educators and teacher educators in the study. Thirty-two of 35 (91.4%) head teacher educators had earned a Ph. D. and 30 of 45 (66.7%) teacher educators had done the same. The data showed that 8.6 % of the head teacher educators and 24.4% of the teacher educators hold an Ed. D. degree. In addition to these degrees, teacher educators from four institutions (8.8%) hold only a Master's degree or equivalent.

Table 12

Highest Degree Earned by Head Teacher Educators and Teacher Educators

	Ph. D.		Ed. D.		MA, MS, MBA	
Position	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
Head Teacher Educators	32	91.4	3	8.6	0	0
Teacher Educators	30	66.7	11	24.4	4	8.8
Overall	62	77.5	14	17.5	4	5

The percentage of time that each head teacher educator and teacher educator spent on teaching when carrying out their professional role is illustrated in Table 13. Those head teacher educators spending greater than or equal to 30% of their time on teaching was 7 out of 35 (20%). Head teacher educators spending the same amount of time was 8.8%. Head teacher educators who spent 35-60% of their time on teaching included 25.7%; teacher educators included 20%. Those spending 65-85% of their time on teaching included 17.1% of head teacher educators and 44.4% of teacher educators. A plurality of (34.3%) head teacher educators and several teacher educators (26.7%) spent 85-100% of their time on teaching. These data are illustrated in Table 13.

The instrument also assessed the percentage of time head teacher educators and teacher educators spent on research and scholarly activities as shown in Table 14. Thirty of the 34 (88%) head teacher educators stated that they spent 0-20 % of their time on research and scholarly activities. Similarly, 31 of the 45 (68.8%) teacher educators spent

0-20% of their time on research and scholarly activities. Very few head teacher educators and teacher educators spent 25 to 50 % of their time on research. Five of the 34 head teacher educators (14.7%) spent 25-50% of their allocated time on research. Teacher educators spent a little more time on research totaling 14 of the 45 (31.1%).

Table 13

Percentage of Time Head Teacher Educators and Teacher Educators Spend on Teaching

	Percentage of Time							
	10-30		35-60		65-80		85-100	
Position	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
Head Teacher Educators	7	20.0	9	25.7	6	17.1	12	34.3
Teacher Educators	4	8.8	9	20.0	20	44.4	12	26.7
Overall	11	13.8	18	22.5	26	32.5	24	30.0

Table 14

Percentage of Time Head Teacher Educators and Teacher Educators Spend on Research and Scholarly Activities

	Percentage of Time			
	0-20		25-50	
Position	**n**	**(%)**	**n**	**(%)**
Head Teacher Educator	30	88	5	14.7
Teacher Educator	31	68.8	14	31.1
Overall	61	76.2	19	23.8

Table 15 illustrates the time head teacher educators and teacher educators spent on outreach/extension/service activities. The data shows that 23 (67%) head teacher educators spent 0-20% of their time on extension/outreach activities. Thirty-six out of 45 (80%) teacher educators spent this same amount of time. Very few head teacher educators and teacher educators spent more than 20% of their time on extension/outreach activities. Fifteen percent of the head teacher educators and 13 % of the teacher educators spent approximately 25-50 percent of their time on this particular area. Those head teacher educators and teacher educators spending 55-90% of their time on extension/outreach programs is 15 % and 6 %, respectively.

Head teacher educators and teacher educators were addressed with the question of how much of their time and effort do they spend on teacher education. Table 16 illustrates that responses of both head teacher educators and teacher educators indicated that the majority of both groups spent 55-100% of their time on teacher education (%4.3% and 57.8%, respectively).

Table 15

Percentage of Time Head Teacher Educators and Teacher Educators Spend on Extension/Outreach/Service

	Percentage of Time					
	0-20		25-50		55-90	
Position	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
Head Teacher Educators	23	67	5	15	5	15
Teacher Educators	36	80	6	13	3	6
Overall	59	75.6	11	14.1	8	10.3

Table 16

Percentage of Time Head Teacher Educators and Teacher Educators Spend on Teacher Education

	Percentage of Time					
	0-20		25-50		55-100	
Position	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
Head Teacher Educators	7	20.0	9	25.7	19	54.3
Teacher Educators	6	13.3	13	28.9	26	57.80
Overall	13	16.3	22	27.5	45	56.25

Table 17 illustrates the total number of years each head teacher educator and teacher educator has been employed in higher education. The average for both head teacher educators and teacher educators was 15.2 years in higher education. Table 17 shows the number of years in higher education in more detail.

Table 17

Number of Years Head Teacher Educators and Teacher Educators Have Been Employed in Higher Education

	Number of Years							
	0-10		11-20		21-30		>30	
Position	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
Head Teacher Educators	11	31.4	13	37.1	8	22.9	3	8.6
Teacher Educators	18	40	18	40	7	15.6	2	4.4
Overall	29	36.3	31	38.8	15	18.8	5	6.25

The last demographic question presented to head teacher educators and teacher educators assessed the number of years they had been employed at their current institution. Table 18 shows the number of both head teacher educators and teacher educators. Eighteen of the 35 (51.4%) head teacher educators had been employed 0-10 years at their present institution, while 24 of the 45 (53.3%) teacher educators had the same number of years at their present institution. Ten (28.6%) head teacher educators and 14 (31.1%) teacher educators had 11-20 years completed at the present institution. Seventeen percent of the head teacher educators and 13.3% of the teacher educators had 21-30 years. Very few head teacher educators and teacher educators had more than 30 years completed at their present institution. One (2.86%) head teacher educator and 1 (2.2%) teacher educator had more than thirty years.

Table 18

Number of Years Head Teacher Educators and Teacher Educators Have Been Employed at Their Present Institution

	Number of Years							
	0-10		11-20		21-30		>30	
Position	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**	**n**	**(%)**
Head Teacher Educators	18	51.4	10	28.6	6	17.1	1	2.86
Teacher Educators	24	53.3	14	31.1	6	13.3	1	2.20
Overall	42	52.5	24	30.0	12	15.0	2	2.50

Findings Related to Research Question Two

Research question two was to determine how head teacher educators perceived the important practices in placement of student teachers with a cooperating school and teacher. The respondents were asked to indicate their perceptions concerning the important practices of placing student teachers with a cooperating school and teacher. The items were scored on a five-point Likert-type scale where 1 indicated "unimportant," 2 indicated "of little importance," 3 indicated "moderately important," 4 indicated "important," and 5 indicated "very important." The SPSS procedure FREQUENCIES was implemented, and the frequencies and number of participants responding to each question were determined (Table 19).

The mean and standard deviation for the level of importance were computed for each specific placement process. The mean and standard deviation for each placement procedure as perceived by head teacher educators were listed in descending order (Table 20). Head teacher educators ranked the placement method of using cooperating teachers having at least three years experience first with a mean score of 4.61. Placing student teachers by a joint effort of the agricultural education faculty and the student teacher (4.18) and the collection of data from student teachers (4.16) were ranked second and third. Head teacher educators ranked in the fourth position the placement of student teachers by a joint effort of the agricultural education faculty with a mean of 3.97. Interviewing student teachers and using input from the state department where in a close fifth and sixth position with respective means of 3.72 and 3.63. On the bottom end of

the importance scale, head teacher educators ranked the placement methodologies of using cooperating teachers who hold a master's degree (3.44), using cooperating centers only once a year (3.27), and allowing student teachers to pick cooperating centers and teachers from a compiled list (3.25) in the seventh, eighth, and ninth positions. Head teacher educators felt that using cooperating centers relatively close to the university (2.84) and allowing cooperating teachers to pick student teachers from a compiled list (1.90) were relatively unimportant in the placement process of student teachers.

Table 19

Perceived Levels of Importance in Placement of Student Teachers With a Cooperating School and Cooperating Teacher Reported by Head Teacher Educators

	Rating									
	Unimportant		**Of little importance**		**Moderately important**		**Important**		**Very important**	
	1		**2**		**3**		**4**		**5**	
Placement Methodology	n	%	n	%	n	%	n	%	n	%
Use cooperating teachers having at least three years experience.	0	0	0	0	3	9.0	7	21.2	23	69.7
Place student teachers by a joint effort of the agricultural education faculty and the student teacher.	0	0	0	0	7	21.2	13	39.4	13	39.4

Table 19

Continued

	Unimportant		Of little importance		Moderately important		Important		Very important	
	1		2		3		4		5	
Placement Methodology	n	%	n	%	n	%	n	%	n	%
Collect data from student teachers.	1	3.2	2	6.5	3	9.7	10	32.3	15	48.4
Place student teachers by a joint effort of the agricultural education faculty.	1	3.1	2	6.3	4	12.5	15	46.9	10	31.3
Interview student teachers.	2	6.3	4	12.5	7	21.9	7	21.9	12	37.5
Use input from the State Department.	1	3.1	6	18.8	6	18.8	10	31.2	9	28.1
Use cooperating teachers that hold a Master's Degree.	1	3.1	4	12.5	11	34.4	12	37.5	4	12.5
Use cooperating centers only once a year.	4	12.1	6	18.2	10	30.3	3	9.1	10	30.3
Allow cooperating teachers to pick student teachers from a compiled list.	16	50.0	10	31.3	2	6.3	1	3.1	3	9.4
Use cooperating centers that are relatively close to the University.	3	9.1	9	27.3	13	39.4	4	12.1	3	9.1

* Scale: 1= unimportant, 2= of little importance, 3= moderately important, 4 = important, and 5 = very important

Table 20

Ranking of Important Elements in Placement of Student Teachers With a Cooperating School and Cooperating Teacher Reported by Head Teacher Educators

Placement Methodology	Rank	Mean*	SD
Use cooperating teachers having at least three years experience.	1	4.61	.66
Place student teachers by a joint effort of the agricultural education faculty and the student teacher.	2	4.18	.77
Collect data from student teachers.	3	4.16	1.10
Place student teachers by a joint effort of the agricultural education faculty.	4	3.97	1.00
Interview student teachers.	5	3.72	1.30
Use input from the State Department.	6	3.63	1.20
Use cooperating teachers that hold a Master's Degree.	7	3.44	.98
Use cooperating centers only once a year.	8	3.27	1.40
Allow student teachers to pick cooperating centers and cooperating teachers from a compiled list.	9	3.25	1.10
Use cooperating centers that are relatively close to the University.	10	2.84	1.10
Allow cooperating teachers to pick student teachers from a compiled list.	11	1.90	1.30

* Scale: 1= unimportant, 2= of little importance, 3= moderately important, 4 = important, and 5 = very important

Findings Related to Research Question Three

Research question three was to determine teacher educator perceptions on the important elements of a cooperating center and cooperating teacher. The respondents

were presented a series of statements and asked to rate the importance of each. The items were scored on a five-point Likert-type scale where 1 indicated "unimportant" and then proceeded to 5 indicating "very important." The SPSS procedure FREQUENCIES was implemented, and means and standard deviations for both the individual teacher educator and the aggregate for the teacher educators at each university were calculated. Table 21 illustrates the responses from the teacher educators individually (n=80) and the aggregate (aggregated within schools) of the teacher educators (n=38 schools).

Table 21

Perceptions of Teacher Educators Regarding Important Elements of a Cooperating Center

Important Elements The Ideal Cooperating Center Should Have:	**Individual**			**Aggregate (School)**			
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**Rank ****
Access to World Wide Web	80	4.79	.47	38	4.79	.34	1
Student access to World Wide Web	80	4.74	.50	38	4.76	.35	2
An active FFA chapter	80	4.75	.56	38	4.74	.43	3
Email access	80	4.71	.51	38	4.73	.37	4
Cooperation from local administration	78	4.71	.58	38	4.70	.47	5
A clean safety record	80	4.46	.69	38	4.48	.54	6
A requirement for all students to participate in a SAE	80	4.29	.73	38	4.24	.54	7
Greenhouse / horticulture facilities	80	4.0	.81	38	4.13	.64	8
Agriculture mechanics laboratory	80	4.08	.97	38	4.07	.81	9

Table 21

Continued

Important Elements The Ideal Cooperating Center Should Have:	Individual			Aggregate (School)			
	N	Mean	SD	N	Mean	SD	Rank **
Located in a comprehensive high school	79	3.89	1.23	37	3.97	.87	10
Project center for SAE projects	78	3.62	.96	38	3.72	.78	11
An updated library	79	3.62	.98	37	3.70	.72	12
A record of outstanding accomplishments	80	3.66	.83	38	3.67	.62	13
Used only once a year	78	3.60	1.26	37	3.57	1.08	14
A student teacher ratio of 75 or fewer students to one teacher	80	3.45	1.10	38	3.43	.78	15
Land laboratory	80	3.41	.99	38	3.42	.79	16
Aquaculture facility	78	2.76	.90	38	2.90	.73	17
A multiple teacher agriculture department	80	2.31	1.01	38	2.45	.96	18
Meats laboratory	80	2.18	1.00	38	2.30	.96	19

* Scale: 1= unimportant, 2= of little importance, 3= moderately important, 4 = important, and 5 = very important

** Ranked by aggregate mean score

Table 22 illustrates the perceptions of teacher educators regarding the important elements of a cooperating teacher. There was a high level of agreement on the important elements that a cooperating teacher should possess. Teacher educators were almost

unanimous (mean of 4.92) on the cooperating teacher being a good role model. There was some uncertainty (mean of 3.23) of whether or not the cooperating teacher should assist the student teacher in locating a job.

Table 22

Perceptions of Teacher Educators Regarding Important Elements of a Cooperating Teacher

Important Elements The Ideal Cooperating Teacher Should :	**Individually**			**Aggregate**			
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**Rank ****
Support other school activities	78	4.28	.72	37	4.92	4.27	1
Be a good role model	79	4.92	.27	37	4.91	.25	2
Have a positive attitude	79	4.89	.32	37	4.89	.27	3
Practice good student management skills in both the classroom and laboratory environment	79	4.88	.32	37	4.86	.29	4
Display continual professional growth	78	4.72	.48	37	4.80	.31	5
Communicate clear expectations to the student teacher	79	4.83	.42	37	4.79	.39	6
Provide frequent evaluations and feedback to the student teacher	78	4.82	.42	37	4.79	.36	6
Be willing to be a mentor	78	4.79	.47	36	4.79	.36	6
Have discipline policies in place	79	4.63	.60	37	4.63	.49	9
Practice a variety of teaching methodology	78	4.59	.57	37	4.58	.47	10
Have a teaching style observed by the teacher education program	71	4.37	.70	36	4.36	.61	11

Table 22

Continued

Important Elements The Ideal Cooperating Teacher Should :	Individually			Aggregate			
	N	Mean	SD	N	Mean	SD	Rank **
Be willing to make daily changes for student teachers	79	4.24	.87	37	4.22	.69	12
Practice good housekeeping in the classroom and laboratory	79	4.33	.67	37	4.36	.53	11
Train Leadership Development and Career Development Event teams to reinforce student learning	79	4.04	.84	37	4.14	.66	13
Dress in an exemplary manner	79	3.78	.98	37	4.00	.80	14
Assist the student teacher in job placement	79	3.23	.96	37	3.24	.75	15

*Scale: 1= unimportant, 2= of little importance, 3= moderately important, 4 = important, and 5 = very important

** Ranked by aggregate mean score

Findings Related to Research Question Four

Approximately 204 student teachers from the 50 randomly selected schools were issued an instrument. From the 204 student teachers whose schools were randomly selected, 139 responded to the instrument for a response rate of 68.1%. From the student teacher population, 61 (43.5%) were males and 79 (56.5%) were females. Table 23 illustrates both the number and percentages of males and females.

Table 23

Gender of Student Teachers

Gender	**n**	**(%)**
Male	61	43.5
Female	79	56.5
Overall	140	100.0

The average age of the student teachers was 24. The ages did vary with the youngest student teacher being 22 years of age and the oldest being 41 years old. For illustration purposes, the ages will be put into groups in Table 24.

Table 24

Age (in years) of Student Teachers

	Age							
	22-25		**26-29**		**30-35**		**>35**	
Position	n	(%)	n	(%)	n	(%)	n	(%)
Student Teacher	119	85.0	13	9.3	6	4.3	2	1.4

Table 25 illustrates the ethnicity breakdown of the student teacher population. A majority (96.4%) of the student teachers were white or Anglo. The remaining student teachers were African American (0.71%), Hispanic (1.42%), and Pacific Islander (0.71%).

Table 25

Ethnicity of Student Teachers

	Race / Ethnicity							
	African-American		**Anglo**		**Hispanic**		**Pacific Islander**	
Position	n	(%)	n	(%)	n	(%)	n	(%)
Student Teachers	1	0.71	135	96.4	2	1.42	1	0.71

The researcher tried to assess the current job/occupation of the former student teachers to discover whether or not the former student teachers were employed in the teaching field. A majority (75.7%) of the student teachers surveyed were employed as agricultural education teachers. Ten of the 137 (7.1%) student teachers were employed in occupations other than those listed on the instrument. A few student teachers (5.0%) were enrolled in graduate school the time the instrument was distributed. The same percentage (5.0%) of the student teachers were employed at a school district teaching a subject other than that of agricultural education. Table 26 shows the student teachers and what their current job was at the time of the distribution of the instrument.

Table 27 shows the other certification credentials that the student teachers were wishing to gain in their future studies. Seventy-nine of the 140 (56.4%) student teachers stated that they planned to seek no other teacher certification. Ten (7.1%) of the student teachers indicated that they were interested in gaining additional certification in the area

of composite science, 10 (7.1%) in life-earth science, 22 (15.7%) in biology, and/or 19 (13.6%) in areas outside the science discipline.

Table 26

Current Job of Student Teachers Surveyed

Job/Occupation	**n**	**(%)**
Teaching Agricultural Education	106	75.7
Other (not listed)	10	7.10
Teaching Another Subject	7	5.00
Graduate School	7	5.00
Working in Ag Industry	5	3.57
Unemployed	3	2.14
Working Outside Agriculture or Education	2	1.43

Table 27

Student Teacher Plans for Certification/Licensing/Credentialing in Other Areas

Certification	**n**	**(%)**
No Other Teacher Certification	79	56.4
Composite Science	10	7.1
Life-Earth Science	10	7.1
Biology	22	15.7
Areas Outside Science	19	13.6

Another demographic question that was presented to the former student teachers was that of expectation in years of how long the student teachers were going to teach agriscience. Table 28 shows that a plurality (47.1%) of the student teachers stated that they expect to teach agriscience for 11 or more years. Twenty-three of the 137 (16.8%) expected to teach agriscience for 3 to 5 years, 22 expected to teach 6 to 10 years (16.1%), 10 expected to teach 1 to 2 years (7.3%), and 16 (11.6%) stated that they had no plans of teaching agricultural education at the secondary level.

Table 28

Student Teachers Expectations of How Many Years of Teaching Agricscience

Years	**n**	**(%)**
Do Not Plan to Teach Agriscience	16	11.6
1-2 Years	10	7.3
3-5 Years	23	16.8
6-10 Years	22	16.1
11 or More Years	66	47.1

Last, student teachers were asked about the size of the school and number of classrooms at their cooperating center. Table 29 indicates the size of the school in which the student teacher performed his/her actual student teaching. A majority (72.7%) of the student teachers taught in a school with 900 or fewer students. A few (18.0%) of the student teachers taught in a large school with a capacity of 1200 or more students.

Table 29

Sizes of Schools Student Teachers Taught In

Size (Number of Students)	**n**	**(%)**
500 or fewer Students	53	38.1
501-900 Students	48	34.5
901-1200 Students	13	9.3
1200 or More Students	25	18.0

When assessing the size of the school, it was deemed necessary to assess the number of classrooms that the student teachers had at their cooperating school. Table 30 indicates that a majority (75.5%) of the student teachers taught in a school with one or two classrooms while the remaining (24.5%) in a school with more than two classrooms.

Table 30

Number of Classrooms Student Teachers Had at Their Cooperating Schools

Number of Classrooms	**n**	**(%)**
One Classroom	59	42.4
Two Classrooms	46	33.1
Three Classrooms	23	16.5
More Than Three Classrooms	11	7.9

Facilities of the student teachers' cooperating school were determined by a series of questions presented to the student teachers. A majority of the student teachers' cooperating schools contained an agricultural mechanics laboratory (86.3%) and a greenhouse structure (70.0%). Few of the cooperating schools contained a meats laboratory (5.0%) or a project center/feeding facility (24.4%). Table 31 indicates the facilities that the student teachers had at their particular cooperating school.

Table 31

Facilities Student Teachers' Cooperating School Contained

Facility	**n**	**(%)**
Agricultural Mechanics Laboratory	120	86.3
Greenhouse	98	70.0
Some Other Horticulture Facility	48	34.5
Meats Laboratory	7	5.0
Aquaculture Facility	45	32.4
Land Laboratory	62	44.6
Project Center/Feeding Facility	34	24.4

Findings Related to Research Question Five

Research question five was used to determine the student teachers' (2001 – 2002 academic school year) perceptions concerning their cooperating center and cooperating

teacher. The items were scored on a five-point Likert-type scale where 1 indicated "strongly disagree," 2 indicated "disagree," 3 "unsure," 4 "agree," and 5 indicated "strongly agree." The SPSS procedure FREQUENCIES was implemented, and the means and standard deviations for both the individual student teachers and the aggregate for the student teachers grouped into school category were calculated. Table 32 illustrates the responses from the student teachers individually (n=139) and the aggregate of the student teachers and their corresponding schools (n=25).

Table 32

Perceptions of Student Teachers Regarding Important Elements of a Cooperating Center (Classroom and Laboratory Instruction)

Important Elements My Cooperating Center had:	**Individual**			**Aggregate**			
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**Rank ****
A daily and systematic routine for classroom and laboratory instruction	139	4.00	.94	25	3.97	.55	1
A discipline management plan used in a structured environment	139	3.94	1.01	25	3.91	.57	2
Creative teaching methods as a basis for day-to-day instruction (i.e.) use of multimedia and varied teaching techniques	139	3.86	1.02	25	3.91	.41	2
Current technology used in instruction	139	3.85	1.07	25	3.69	.71	4
Overall				**25**	**3.86**	**.34**	

* Scale: 1= Strongly disagree, 2= Disagree, 3= Unsure, 4 = Agree, and 5 = Strongly agree

** Ranked by aggregate mean score

Table 32 reflects the responses of student teachers regarding important elements of a cooperating center in the area of "Classroom and Laboratory Instruction." One hundred thirty-nine student teachers from 25 different schools responded to the questions falling into the "Classroom and Laboratory Instruction."

Each question was assigned a rank from "most important" to "least important." Student teachers ranked the question dealing with a routine for classroom and laboratory instruction the highest and most important in this particular grouping. A total of 139 student teachers responded for a total of 25 different teacher education programs. Most of the responses of student teachers fell into the upper portion of the "agreement" scale.

Three questions fell in to the Supervised Agricultural Experience Program and the student teachers were asked to rate their agreement of each one of these (Table 33).

Table 33

Perceptions of Student Teachers Regarding Important Elements of a Cooperating Center (Supervised Agricultural Experience Program)

Important Elements My Cooperating Center had:	**Individual**			**Aggregate**			
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**Rank ****
Diversity within students' SAEPs	139	3.73	1.01	25	3.72	.54	1
Project supervision and explanation of this commitment	139	3.59	1.13	25	3.67	.50	2
All students meeting the state SAEP requirements, with accurate recordbooks	139	3.09	1.19	25	3.12	.65	3
Overall				**25**	**3.50**	**.49**	

* Scale: 1= Strongly disagree, 2= Disagree, 3= Unsure, 4 = Agree, and 5 = Strongly agree

** Ranked by aggregate mean score

As shown from Table 33, approximately 74 out of 139 (53.0%) agreed that their particular cooperating center had diversity within the students' SAEPs. Twenty-six out of 139 (18.7%) "strongly agreed" with the same question. Student teachers' responses to the question of project supervision and explanation of this commitment were also agreed on by most of the respondents. Fifty-nine out of 139 (42.4%) agreed that their cooperating center had project supervision and that their cooperating teachers explained this commitment fully. Twenty-four of the student teachers were unsure of the project supervision question and their responses were "3" – unsure.

The next set of questions that were assessed was those dealing with student leadership development (Career Development Events and Leadership Development Events) as shown by Table 34. Student teachers "strongly agreed" (62.6%) that their cooperating teachers were familiar with current rules for participation in these leadership events. The lowest ranking fell under the category of strong classroom instruction in student leadership development. Even though this particular question was ranked last, it did indicate that it was necessarily a "disagree" or "strongly disagree" response. For this particular question, only (14.3%) of the student teachers "disagreed" with the question. These responses decreased the overall mean for the question concerning classroom instruction in student leadership development. See Table 34 for a detailed description.

Table 34

Perceptions of Student Teachers Regarding Important Elements of a Cooperating Center (Student Leadership Development – LDEs, CDE's and other FFA Activities)

Important Elements My Cooperating Center had:	**Individual**			**Aggregate**			
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**Rank ****
Cooperating teachers who were familiar with current rules for participation in events (i.e.) CDEs and LDEs	139	4.51	.76	25	4.40	.46	1
Resources to train a competitive team	139	4.40	.83	25	4.32	.42	2
Opportunities for the student teacher to judge or monitor a district or area LDE	139	4.35	.97	25	4.30	.68	3
Cooperating teachers who delegated the training of at least one team to the student teacher	139	4.33	1.07	25	4.27	.43	4
Student participation in advanced awards and degrees on the district, area, state, and national levels	139	4.25	.81	25	4.25	.35	5
A history of successful participation	139	4.30	.85	25	4.21	.56	6
These activities as essentials for a balanced program	139	4.07	.95	25	4.03	.58	7
Strong classroom instruction in student leadership development	139	3.88	1.02	25	3.92	.60	8
Overall				**25**	**4.21**	**.40**	

* Scale: 1= Strongly disagree, 2= Disagree, 3= Unsure, 4 = Agree, and 5 = Strongly agree

** Ranked by aggregate mean score

Student teachers were also asked school and community relationship questions concerning their particular cooperating center as shown in Table 35. One hundred twenty-seven of 139 (91.3%) student teachers "strongly agreed" or "agreed" with the question concerning their cooperating center having recognized integrity of the cooperating teacher and program. A majority of the questions concerning school and community relationships had a mean in the upper portion of the agreement scale.

Table 35

Perceptions of Student Teachers Regarding Important Elements of a Cooperating Center (School and Community Relationships)

My Cooperating Center had:	**Individual**			**Aggregate**			
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**Rank ****
Recognized integrity of the cooperating teacher and program	139	4.39	.82	25	4.36	.29	1
A cooperating teacher who supported activities in the community (i.e.) service organizations	140	4.22	.79	25	4.27	.40	2
Community service projects	140	4.11	.85	25	4.18	.48	3
A spirit of professional cooperating among teachers	140	4.15	.96	25	4.17	.38	4
Availability of facilities (i.e.) computer labs, shops, school farm	139	4.15	.99	25	4.05	.67	5
Departmental support organizations (i.e.) advisory councils, booster clubs, and alumni	140	3.89	1.12	25	3.97	.49	6
School administrators who were involved in program activities	140	3.86	1.10	25	3.80	.75	7
Overall				**25**	**4.11**	**.33**	

* Scale: 1= Strongly disagree, 2= Disagree, 3= Unsure, 4 = Agree, and 5 = Strongly agree
** Ranked by aggregate mean score

The last set of questions dealt with the cooperating teacher and student teacher relationships while the student teachers were at their particular cooperating center (Table 36).

Table 36

Perceptions of Student Teachers Regarding Important Elements of a Cooperating Center (Cooperating Teacher and Student Teacher Relationships)

Important Elements My Cooperating Center had:	**Individual**			**Aggregate**			
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**Rank ****
A cooperating teacher who was willing to be my mentor	139	4.48	1.00	25	4.55	.47	1
A cooperating teacher who had a positive attitude	139	4.50	.96	25	4.52	.45	2
A cooperating teacher who was a "good" role model to me	139	4.40	1.09	25	4.47	.49	3
A cooperating teacher who communicated clear expectations to me as the student teacher	139	4.19	1.15	25	4.29	.55	4
A cooperating teacher who provided frequent evaluations and feedback to me as the student teacher	139	4.14	1.19	25	4.22	.71	5
Discipline policies that were in place and enforced	139	4.02	1.13	25	4.11	.64	6
"Reinforcement" techniques in teaching (i.e.) pace, reteaching, retesting, and accommodation of various learning styles	139	4.03	1.05	25	4.11	.51	6
Overall				**25**	**4.32**	**.48**	

* Scale: 1= Strongly disagree, 2= Disagree, 3= Unsure, 4 = Agree, and 5 = Strongly agree
** Ranked by aggregate mean score

All of the individual overall and aggregated means were “4” or above meaning that the average of the student teachers responses were all in agreement with the questions. The highest-ranking question dealt with the student teachers’ cooperating teacher being a mentor to them. As shown in Table 36, 122 of 139 (87.8%) student teachers “agreed” or “ strongly agreed” that their cooperating teacher served as a mentor and was willing to do so.

Findings Related to Research Question Six

Research question six was to determine the quality of the student teaching experience as perceived by student teachers in agricultural education. Table 37 illustrates the responses of the student teacher respondents.

Student teachers, aggregated by schools, ranked the question dealing with learning from their student teaching experience first. One hundred three of 139 (74.1%) “strongly agreed” that their student teaching experience was a well-rounded learning experience. The lowest ranking question was the student teachers’ perceptions of student teaching being a realistic example of teaching. Many thought that student teaching was not a realistic example of what an agriculture teacher actually does both in and out of the classroom.

Table 37

Perceptions of Student Teachers Regarding the Quality of Their Student Teaching Experience

Important Elements Overall Student Teaching Experience:	**Individual**			**Aggregate**			
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**Rank ****
As a student teacher, I learned much from my student teaching experience	140	4.65	.74	25	4.63	.38	1
Student teaching is the most valuable component of the teacher education program	140	4.54	.80	25	4.57	.35	2
Student teaching was a positive experience	140	4.46	.89	25	4.50	.38	3
My cooperating teacher was helpful	140	4.47	1.00	25	4.49	.46	4
I was thoroughly pleased with my overall student teaching experience	140	4.31	1.05	25	4.35	.48	5
My cooperating center was an excellent facility	140	4.21	.99	25	4.32	.46	6
Student teaching is a realistic example of actual teaching	140	3.96	1.12	25	4.07	.60	7

* Scale: 1= Strongly disagree, 2= Disagree, 3= Unsure, 4 = Agree, and 5 = Strongly agree

** Ranked by aggregate mean score

Findings Related to Research Question Seven

Research question seven was to determine if there was a relationship between teacher educator perceptions of important elements of student teaching and the quality of

the student teacher experience. The researcher ran a reliability analysis on the individual responses of each head teacher educator and teacher educator, and each section of the instrument was examined to determine internal consistency of each item on the survey. Those items that were shown to lower the alpha were discarded. Table 38 illustrates the reliability analysis of the teacher educator instruments.

Table 38

Reliability Analysis of Each Scale of the Teacher Educator Instrument

Important Elements	**Alpha**
Ideal Cooperating Center Facility (built environment): (Questions 10 – 25)	.75
Ideal Cooperating Center Functionally (Questions 26 – 28)	.50
Ideal Cooperating Teacher: (Questions 29 – 44)	.81
Student Teacher Placement Methodology: (Questions 45 – 55)	.53

Discarding the question concerning the cooperating center only being used once a year increased the reliability analysis for "the ideal cooperating center." After eliminating this particular question, the reliability analysis was increased to alpha = .53. After determining the reliability of each scale of the teacher educator instruments, a composite mean was developed for each scale of the instrument. Each individual had a composite mean for each of the four scales of the instrument. Additionally, an aggregate score (aggregated by school) was developed and used for comparison with the overall

student teacher experience. Reliability analysis was used to determine internal consistency of the student teaching experience. Table 39 illustrates the findings of this particular section of the student teacher instrument.

Table 39

Reliability Analysis of the Section Concerning Overall Student Teacher Experience

	Alpha
Student Teaching Experience	.89

The researcher performed similar statistical analysis on the student teacher portion of the instrument. A composite mean was developed for each student teacher concerning elements of the overall student teaching experience. The composite mean was then aggregated by teacher education program from which the student teacher graduated. This aggregate mean was used to determine if relationships existed between perceptions of teacher educators on the important elements of student teaching and the overall student teacher experience.

Table 40 illustrates the relationships between teacher educator perceptions of important elements of student teaching and the overall quality of the student teaching experience.

Table 40

Pearson's Product Moment Correlation of Teacher Educator Perceptions of Important Elements of Student Teaching and the Quality of the Student Teacher Experience

Important Elements Scale [a]	**N**	***r***	***p***
Ideal Cooperating Center Facility:	38	-.236	.257
Ideal Cooperating Center:	38	-.105	.617
Ideal Cooperating Teacher:	38	-.067	.757

[a] Important element scale: 1 = unimportant, 2 = of little importance, 3 = moderately important, 4 = important, 5 = very important

Again, the teacher educator instrument was categorized into three different categories and reliability analysis used on each. Table 40 illustrates the three different categories of the teacher educator instrument. Additionally, the overall student teaching experience questions were also categorized into one category. Table 40 shows the relationships of the teacher educator perceptions of important elements of student teaching and the perceptions of the student teachers regarding their overall experience. As table 40 illustrates, the first set of questions that the teacher educators were asked pertained to what the ideal cooperating center should have. The composite mean, aggregated by school, was then compared to the overall student teacher experience, also aggregated by school. This particular category had an overall mean of 3.99 and when Pearson Product Moment correlation was calculated, no significant relationship was found. The category of questions concerning "what the ideal cooperating center should have" had a negative correlation of -.236 with a *p* value of .257. Significance for the

correlation statistics was set a priori at the .05 level. No relationships existed between these two variables. This was similar for the other two categories concerning the question of what the ideal cooperating center should be and what the ideal cooperating teacher should be like. Respectively, each one had a correlation of -.105 and -.067 with p values that were not statistically significant. Conclusions of these correlations will be addressed in Chapter V.

Findings Related to Research Question Eight

Research question eight was to determine if there was a relationship between the student teacher perceptions of their elements of their cooperating center and the quality of their experience. The researcher ran a reliability analysis on the individual responses of each student teacher. Each section of the instrument was examined to determine internal consistency of each item on the survey. Those items that were shown to lower the alpha were discarded. Table 41 illustrates the reliability analysis of the student teacher instrument.

Table 42 illustrates the correlation between how student teachers perceived their cooperating centers and the quality of their experience.

Table 41

Reliability Analysis of Each Section of the Student Teacher Instrument

Cooperating Center Elements Scale	**Alpha**
Cooperating Center Facilities (Questions 9-15)	.43
Classroom and Laboratory Instruction (Questions 16-19)	.77
Supervised Agriculture Experience (Questions 20-22)	.82
Student Leadership Development (LDE, CDE, and Other FFA Activities) (Questions 23-30	.88
School and Community Relationships (Questions 31-37)	.81
Cooperating Teacher and Student Teacher Relationships (Questions 38-44)	.95

There were some relationships between the student teacher perceptions of their cooperating center elements and the quality of their student teaching experience (Table 42). The first set of questions dealt with the student teachers' cooperating center facilities. When related to the quality of their experience, a correlation of .540 ($p < 0.05$) was obtained. There was a small relationship between the Supervised Agriculture Experience scale and the student teacher quality of experience. The *r* value was .362 with a p value of 0.075. The last two sections of questions on the student teacher instrument proved to be both significant at the 0.05 level. School and Community

Relationships had an *r* value of .447 ($p = 0.025$) and Cooperating Teacher and Student Teacher Relationships with an *r* value of .853 ($p = 0.001$). The results of this section of relationships and correlational statistics will be discussed in further detail in Chapter V.

Table 42

Pearson's Product Moment Correlation Between Student Teacher Perceptions of Their Cooperating Center Elements and the Quality of Their Student Experience

Cooperating Center Elements Scale	**N**	***r***	***p***
Cooperating Center Facilities [a]	25	.540	0.005 **
Classroom and Laboratory Instruction [b]	25	.052	0.805
Supervised Agriculture Experience Program [b]	25	.362	0.075
Student Leadership Development (LDE's, CDE's, and other FFA Activities) [b]	25	.087	0.679
School and Community Relationships [b]	25	.447	0.025 *
Cooperating Teacher and Student Teacher Relationships [b]	25	.853	0.001 **

[a] Cooperating Center Facilities Scale: 1 = yes, 2 = no
[b] Important element scale: 1 = unimportant, 2 = of little importance, 3 = moderately important, 4 = important, 5 = very important
* $p < 0.05$
** $p < 0.01$

Findings Related to Research Question Nine

Research question nine was to determine if there was a relationship between the level of importance of student teacher placement methods and the quality of the student teacher experience. The researcher ran a reliability analysis on the individual responses of each head teacher educator. Each section of the instrument was examined to determine internal consistency of each item on the survey. Those items that were shown to lower the alpha were discarded. Table 43 illustrates the reliability analysis of the head teacher educator portion of the instrument (Student Teacher Placement Methods).

Table 43

Reliability Analysis of Head Teacher Educator Section of Instrument: "Student Teacher Placement Methods"

Student Teacher Placement Methods Scale	**Alpha**
Student Teacher Placement Methods (Questions 45-55)	.53

Table 44 illustrates the correlation between the level of importance of student teacher placement methods and the quality of the student teacher experience. As seen from Table 44, there was a moderate correlation (Davis, 1971) between the level of importance of student teacher placement methods and the quality of the student teacher experience. An r value of .389 (p = .067) was not statistically significant at the 0.05 level. It can be said that there was a small significance there (Davis, 1971). The overall mean (3.50) told the researcher that the majority of the head teacher educators thought

that most of the methods were moderately important. Again, the results from this particular correlation will be discussed in further detail and conclusions will be ascertained in Chapter V.

Table 44

Pearson's Product Moment Correlation Between the Level of Importance of Student Teacher Placement Methods and the Quality of the Student Teacher Experience

Important Elements Scale [a]	**N**	***r***	***p***
Student Teacher Placement Methods	33	.389	.067

[a] Important element scale: 1 = unimportant, 2 = of little importance, 3 = moderately important, 4 = important, 5 = very important

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

There were two purposes for conducting this study. The first purpose was to determine important elements of student teaching as perceived by teacher educators and to determine the important practices during placement of student teachers with cooperating schools and cooperating teachers. The second purpose of the study was then to determine how each student teacher perceived his/her quality of experience based on these criteria and placement processes.

The following research questions were pursued to accomplish the purpose of the study:

1. What were the personal and professional characteristics of teacher educators of agriculture in the United States?
2. What were the head teacher educator perceptions of the important practices in placement of student teachers with a cooperating center and cooperating teacher?
3. What were the teacher educator perceptions of important elements of a cooperating center and a cooperating teacher?
4. What were the personal and professional characteristics of student teachers of agriculture in the United States?

5. What were the student teacher perceptions of their cooperating center and cooperating teacher?
6. What was the quality of the student teaching experience as perceived by student teachers in agricultural education?
7. Was there a relationship between teacher educator perceptions of important elements of student teaching and the quality of the student teacher experience?
8. Was there a relationship between the student teacher perceptions of their cooperating center elements and the quality of their experience?
9. Was there a relationship between the level of importance of student teacher placement methods and the quality of the student teacher experience?

The study was conducted quantitatively using a descriptive-correlational research design. The correlational research design was useful for studying problems in education and other social sciences. The research was *ex post facto* in nature due to the fact that the causes were studied after the initial student teaching experience. The correlational research design was useful in assessing the important practices in placing student teachers with cooperating schools and cooperating teachers and perceptions of characteristics and criteria for cooperating teachers and cooperating centers. These constructs were then examined with the quality of the student teachers' experience to determine if any relationships existed. The research attempted to detect relationships between the independent variable, the important practices for placing student teachers

with cooperating schools and teachers and perceptions of teacher educators and student teachers on the important elements of student teaching, and the dependent variable, the student teaching experience, as well as the quality of experience of student teachers.

As of August 19, 2002, there were 88 teacher education programs in the United States. A simple random approach was used to randomly select 50 teacher education programs to examine. Two subgroups of this population were used; the first consisted of recent graduates of the teacher education program in the 2001-2002 school year. The second subgroup consisted of 1) head teacher educators at each institution, and 2) faculty with responsibilities in the student teacher placement or supervisory processes.

Three different mail questionnaires were used to gather information from the targeted population. The population consisted of 50 head teacher educators, 77 teacher educators, and 204 student teachers from the 2001-2002 academic school year. Of the 50 head teacher educators, 35 responded for a response rate of 70%. Similarly, 45 of the teacher educators responded for a rate of 59.0%. After the instruments were returned from head teacher educators, the student teachers were sent a questionnaire. The accessible population consisted of 204 student teachers; responses from 140 student teachers were received and usable, for a response rate of 69.0%.

The data were analyzed using SPSS 10.0 and descriptive statistics reliability (Cronbach's alpha), correlations (Pearson product moment), and Chi-square / t-tests to compare respondents to non-respondents. A confidence interval of alpha .05 was set *a priori*.

Conclusions

Research Question One

Research question one sought to determine the personal and professional characteristics of teacher educators of agriculture in the United States. The "typical" teacher educator participant was a white, male, of tenure status or on tenure-track promotion, classified in the Professorial rank with a Ph.D. degree. The majority of teacher educators had been employed in higher education 5 to 20 years with a few being in higher education greater than 30 years. Forty-two teacher educators had been employed at their present institution 10 years or less, with a 2 teacher educators being employed greater than 30 years.

Teacher educators spent the majority of their time on teaching rather than extension/service/outreach activities or scholarly activities. The "typical" teacher educator spent 65 to 100 percent of their time on teaching, 0 to 20 percent of their time on research and scholarly activities, and 0 to 20 percent of their time on extension / outreach / service activities. Most of the allotted time head teacher educators and teacher educators spent on teaching involved teaching courses concerning teacher education and other teacher education administrative duties.

Research Question Two

Research question two sought to determine the head teacher educators' perceptions of the important practices in placement of student teachers with a cooperating center and teacher. Head teacher educators felt that when placing student teachers, it was highly important to use cooperating teachers with at least three years teaching experience (mean = 4.61). Additionally, the teacher educators felt that the placement methodology of placing student teachers by a joint effort of the agricultural education faculty and the student teacher (mean = 4.18), collection of data from student teachers (mean = 4.16), placing student teachers by a joint effort of the agricultural education faculty (mean = 3.97), interviewing the student teachers (mean = 3.72), and using State Department input (mean = 3.63) was important to be used in placement. Only moderately important to the placement process was cooperating teachers that held a Master's Degree (mean = 3.44), using cooperating centers only once a year (mean = 3.27), and allowing student teachers to pick cooperating centers and teachers (mean = 3.25). Head teacher educators indicated that when placing student teachers, cooperating centers close to the University (mean = 2.84) and allowing cooperating teachers to pick student teachers (mean = 1.90) were not important in the placement process. When the placement processes were put in rank order, the placement practice of using cooperating teachers having at least three years experience ranked first (mean = 4.61) and allowing cooperating teachers to pick student teachers from a compiled list ranked last (mean = 1.90).

Abel, Ansel, Hauwiller, and Sparapani (1986) found similar results and indicated that new supervising or cooperating teachers should be selected on several qualifications or criteria. These included competency in technical curriculum, years of experience in teaching, skill in teaching in-school and out-of-school classes, educational philosophy, leadership ability, and philosophy of teacher training.

Norris and Larke (1989) were also in agreement to results found in the study in that they found that the ideal cooperating teacher should have a Master's degree and be identified as an opinion leader in the local community.

Research Question Three

Research question three sought to determine teacher educator perceptions of important elements of a cooperating center and teacher. All of the important elements involving technology of a cooperating center were ranked important by the teacher educators. Overall, when speaking of the cooperating center, teacher educators indicated that student teachers having access to the World Wide Web (mean = 4.79) was the most important element that should be present. On the same note, teacher educators stated that student access to the World Wide Web (mean= 4.76) and email access (mean = 4.73) was also very important to a cooperating center.

Additionally, the cooperating center elements of having an active FFA chapter (mean = 4.74), cooperation from local administration (mean = 4.70), a clean safety record (mean = 4.48), SAE programs (mean = 4.24), greenhouse and horticulture

facilities (mean = 4.13), and an agriculture mechanics laboratory (mean = 4.07) were all important to teacher educators. On the contrary, teacher educators felt that a cooperating center having an aquaculture facility (mean = 2.90) or meats laboratory (mean = 2.30) and being a multiple teacher department (mean = 2.45) were fairly unimportant.

In addition to the important elements of a cooperating center, teacher educators were in overall agreement that the most important element of a cooperating teacher was one who supports other school activities (mean = 4.92). Teacher educators also felt that a cooperating teacher being a good role model (mean = 4.91), having a positive attitude (mean = 4.89), and practicing good student management skills in the classroom and laboratory (mean = 4.86) were also important elements that a cooperating teacher should possess. The least important element of a cooperating teacher, as teacher educators indicated, was that of assisting the student teacher in job placement (mean = 3.24).

Similar results were found by Deeds and Barrick (1986). The researchers reported that high quality programs might be associated with excellent instructional programs, facilities and equipment that were in good working order, and a supervised agricultural experience program where student and parents were active in both the school and the community. These particular characteristics were stated and recommended for use in the future selection of cooperating schools to instill a more positive attitude toward the profession. Norris and Larke (1989) also had similar results indicating that teacher educators wanted the cooperating schools to have a record of outstanding accomplishments and be ranked above other secondary agriculture departments.

When speaking of important elements of a cooperating teacher, Camp and Bailey (1999) stated that some of the most important duties of a cooperating teacher include supervising, guiding, evaluating, and counseling the student teacher.

Additionally, Norris and Larke (1989) found similar results in their comprehensive literature review and indicated most commonly mentioned qualities that supervising (cooperating) teachers should possess include:

1. A willingness to devote time to the student teacher's needs.
2. A demonstrated interest in professional improvement.
3. Effectiveness in the motivation of students proven by high enrollment levels and participation if the local FFA program.
4. A basic understanding of the university's teacher education program in agriculture
5. Demonstration of being well organized and responsible individual.
6. A personal philosophy of teacher education that is consistent with the local teacher education program in agriculture.

Research Question Four

Research question four was to determine the personal and professional characteristics of student teachers of agriculture in the United States. The "typical" student teacher of agriculture in the United States was of Anglo decent, 24 years of age, was currently teaching agricultural education at the secondary level, and planned to

teach agriculture for 6 or more years. Student teachers' gender was evenly distributed between males and females. Fifty six percent of the student teachers did not wish to gain any other certification credentials, with the remaining 44% wishing to gain credentials in other curriculum areas.

The "typical" student teacher student taught in a cooperating school with 2 or fewer agriculture classrooms and fewer than 900 students in the high school. A majority of the student teachers' cooperating centers had an agriculture mechanics laboratory and greenhouse structure. A limited number of the student teachers' cooperating centers had a meats laboratory, aquaculture facility, land laboratory, or project center.

Research Question Five

Research question five was to determine the student teacher perceptions of their cooperating center and teacher. Overall, student teachers agreed that important elements in the areas of "classroom and laboratory instruction," "supervised agriculture experience program," "student leadership development," "school and community relationships," and "cooperating teacher and student teacher relationships" were present at their cooperating centers and able to be experienced on a daily basis. Ranking in the highest positions, student teachers agreed that their cooperating center had a cooperating teacher who was willing to be a mentor (mean = 4.55), cooperating teachers who were familiar with current rules for participation in events (mean = 4.40), a recognized integrity of the cooperating teacher and program (mean = 4.36), a daily and systematic

routine for classroom and laboratory instruction (mean = 3.97), and diversity within student's SAEPs (mean = 3.72). Overall, student teachers were in agreement or strong agreement that their cooperating center contained the important elements in these five areas.

In a similar study by Harlin, Edwards, and Briers (2002), student teachers were asked to rate the important elements of the student teaching experience before and after an 11-week field experience. Pre and posttest results were determined and it was found that the importance declined in all of the specific core areas, perhaps due to the student teachers experiencing actual teaching conditions. The pretest indicated that one of the highest rated elements was "a discipline management plan used in a structured environment" (mean = 4.75). In this particular study, student teachers moderately agreed that their particular cooperating center contained this element (mean = 3.94). In addition, the lowest rated elements in the pretest of Harlin, Edwards, Briers (2002) study were: "diversity within students SAEPs" (mean = 4.06) and "a history of successful participation" (mean = 4.00). Similarly, the current study indicated that student teachers moderately agreed (mean = 3.73) with the element of "diversity within students' SAEPs" and agreed (mean = 4.30) that their cooperating center "had a history of successful participation".

Research Question Six

Research question six was to determine the quality of the student teaching experience as perceived by those student teachers in the 2001-2002 academic school year. Overall, student teachers strongly agreed that they learned a great deal from their student teaching experience (mean = 4.63). The "typical" student teaching experience was one that was positive (mean = 4.50), one that had a helpful cooperating teacher (mean = 4.49), and one had at an excellent cooperating center facility (mean = 4.32). Student teachers were pleased with their overall experience (mean = 4.31) and agreed that student teaching was a realistic example of actual teaching (mean = 4.07)

Similar results were found by Rome and Moss (1990) in that student teachers strongly agreed that student teaching was a positive experience and strongly disagreed that student teaching was of little or no value to the teacher education program. Additionally, Borne and Moss (1988) studied student teacher's self-perceived levels of preparation and concluded that first year teachers rated their level of preparation of teaching as acceptable. Rome and Moss (1990) also found that teachers were undecided on whether or not student teaching was a realistic example of actual teaching. Harlin, Edwards, & Briers (2002) also found that changes in student teachers' theories about teaching resulted after student teaching. The researchers suggested that this was further evidence supporting the need for the student teaching experiences afforded by student teaching – experiences that assist the novice teachers in developing their professional behaviors (Harlin, Edwards, & Briers, 2002).

Research Question Seven

Research question seven was to determine if there was a relationship between teacher educator perceptions of important elements of student teaching and the quality of the student teaching experience.

The correlation coefficient for a summated importance score of what the cooperating center should have to the quality of the student teacher experience resulted in no significant correlation ($r = -.236$, $p = .257$). This indicated that the overall student teaching experience satisfaction score was not increased or decreased by what teacher educators thought the cooperating center facility should have. These constructs included laboratories, technology infrastructure, libraries, and project centers. Similarly, the correlation coefficients for the summated importance scores of what the ideal cooperating center ($r = -.105$, $p = .617$) and what the ideal cooperating teacher should be ($r = -.067$, $p = .757$ to the quality of the student teacher experience also showed no correlation. The overall student teaching experience satisfaction score was not increased or decreased by teacher educator importance ratings of the cooperating center being used only once per year, being located in a comprehensive school, and being a multiple teacher agriculture program.

These results indicated that what teacher educators thought were important elements of the cooperating center and teacher does not directly affect the overall quality of the student teaching experience for student teachers, but the time and effort that each

teacher educators spends on placing these student teachers may have some effect on that experience.

Other researchers (Abel, Ansel, Hauwiller, & Sparapani, 1986; Norris & Larke, 1989; Deeds & Barrick, 1986) stated that high quality programs were associated with excellent cooperating teachers, excellent program facilities, and excellent human relations with the community. These criteria were recommended to teacher educators for use in future placement of student teachers with a cooperating school and teacher.

Research Question Eight

Research question eight was to determine if there was a direct relationship between the student teacher perceptions of their cooperating center elements and the quality of their experience.

Correlations of topic agreement to the quality of the student teaching experience that were significantly correlated at the alpha level of .01 were cooperating center facilities ($r = .540$, $p = .005$) and cooperating teacher and student teacher relationships ($r = .853$, $p = .001$). The correlation of topic agreement to the quality of the student teaching experience that was significantly correlated at the alpha level of .05 was that of school and community relationships ($r = .447$, $p = .025$). Although the other cooperating center elements such as classroom and laboratory instruction, supervised agriculture experience, and student leadership development were positively correlated with the

quality of the student teaching experience, there were no significant correlations at the .05 alpha level.

The significant correlations suggest that if a student teacher perceived the cooperating center facilities to be numerous and adequate, he/she had a good quality student teaching experience. The most highly correlated agreement scale with the quality of the student teaching experience was that of having a good relationship between the cooperating teacher and student teacher. If a good relationship was established, the student teacher had a better experience than those who did perceive a good relationship with his/her cooperating teacher. Additionally, if the agriculture program at the cooperating center had a good relationship with community persons and school personnel, such things as the community having a recognized integrity for the cooperating teacher and program, departmental support, participation in service organizations, school administrators who were involved in the program, community service projects, and computer labs, shops, and school farms, the student teacher was more likely to have a better student teaching experience than those student teachers at cooperating centers lacking these elements.

Similar results were found by several researchers (Borne & Moss, 1988; Harlin, Edwards, & Briers, 2002; Rome & Moss, 1990). The researchers indicated that changes in student teachers' theories about teaching resulted after student teaching. It was also stated that the student teacher's felt well prepared for entering the teaching profession after student teaching was completed. Rome and Moss (1990) indicated that student

teachers agreed that student teaching was a positive experience due to having an outstanding cooperating center and teacher.

Research Question Nine

Research question nine was to determine if there was a relationship between the level of importance of student teacher placement methods and the quality of the student teacher experience.

The correlation coefficient of r = .389 indicated a low positive relationship (Davis, 1971), but was not significant at the .05 alpha level. Due to low number of paired responses, there was no statistical significance, but practical significance may be present. The correlation coefficient for student teacher placement methods was $r = .389$; ($p = .067$). This indicated that head teacher educators' perceptions on the importance of the various student teacher placement methods might, indeed, have some slight effect on the quality of the student teacher experience.

Deeds and Barrick (1986) indicated that high quality programs were associated with excellent instructional facilities and cooperating teachers, as well as, a high quality supervised agriculture experience program and relationship with the community. With these in mind, Deeds and Barrick (1986) stated that these important placement methods and criteria should be reviewed and used in future selection of cooperating centers and teachers.

Implications

This study indicates that agriculture teacher education programs have certainly had an impact on the lives of students who complete student teaching. Keeping in mind Koziol, Minnick, and Sherman (1996), the student teaching experience is widely accepted as one of the most essential and useful components of a teacher education program. As a result of their participation in this study, student teachers indicate that their overall quality of experience is, for the most part, effective. Student teachers indicate that they learn a great deal and they are pleased with their overall student teaching experience. They also indicate that they will teach agriculture science or some other subject after completing their student teaching experience. When assessing relationships between student teaching experience and head teacher educators' perceptions on the importance of various student teacher placement methods, relationships were found that may directly affect the overall student teacher experience. Additionally, relationships between how teacher educators perceive the important elements of a cooperating teacher and cooperating center to the overall student teaching experience are present and may also affect the overall student teacher experience. Elements of the student teacher's cooperating center and cooperating teacher and how they perceive these also have some effect on their overall student teaching experience.

The study indicates that teacher educators were in agreement with Abel, Ansel, Hauwiller, and Sparapani (1986) in that cooperating teachers and cooperating schools should be selected on several qualifications and criteria to ensure a high quality student

teaching experience. Although head teacher educators and teacher educators appear to know what the ideal cooperating center and cooperating teacher should possess, it is obviously difficult to find a teacher or school possessing all of these qualities. Teacher education programs must use their perceptions of these important elements and what is ideal, to effectively find a cooperating school and cooperating teacher that best fits the student teacher; this fit may negatively or positively affect the overall quality of the student teachers' experience while student teaching.

Recommendations

Based on the findings and conclusions in this study, recommendations have been made in two specific areas. These are 1) recommendations for practice and 2) recommendations for further research.

Recommendations for practice have been developed and are presented as follows:

1. Student teaching in agriculture in the United States should continue. Data indicate that student teaching was a positive experience for most student teacher respondents. This recommendation concurs with the research conducted by Rome and Moss (1990) who found that student teachers strongly agreed that student teaching was a positive experience.
2. The degree to which teacher educators invest "energy" in selecting student teaching centers and placing student teachers in these centers is positively related

to the quality of experience as perceived by student teachers. Thus, teacher educators should determine what the ideal cooperating teacher and cooperating school should possess and use these multiple measures to place student teachers in the most "ideal" cooperating center. This recommendation concurs with research conducted by Deeds and Barrick (1986) and Norris and Larke (1989).

3. When placing student teachers, teacher education programs in agriculture should consult with other agricultural education faculty and the student teacher. Data indicate that the number one placement methodology was using a cooperating teacher with at least 3 years teaching experience. Additionally, teacher educators should research cooperating schools, cooperating teachers, and student teachers to find the "ideal" situation for the student teacher. This is in consensus with research conducted by Abel, Ansel, Hauwiller, and Sparapani (1986) which states that new cooperating centers and cooperating teachers should be selected on several qualifications and criteria. These include cooperating teachers that have a willingness to devote time each day to the student teacher, have an ability to motivate students, are well organized, and have an interest in professional improvement. The researchers also state that the cooperating center should be selected on the quality of the supervised agriculture experience program, the physical facilities and condition of equipment, the curriculum offered, and the extent of activity of the FFA program.
4. Data indicate that student teachers' cooperating centers contained local access to technology and student access to the World Wide Web and email. A majority of

the student teachers indicated that their cooperating center placement was within a very active FFA program. Teacher education programs should continue to place student teachers in these settings because these elements may be related to the quality of experience of the student teacher.

5. Data indicate a positive, significant correlation between the quality of the student teaching experience and cooperating center facilities, cooperating teacher and student teacher relationships, and school and community relationships. Teacher education programs should use knowledge about the relationships between these variables to effectively pair student teachers with a cooperating teacher whose personality and attitude are similar. Data suggest that this relationship between the cooperating teacher and student teacher has a direct impact on the quality of experience of the student teacher. Teacher education programs should have a system to ensure the cooperating centers' facilities are well rounded and that the cooperating center is active within the surrounding community. This recommendation is in consensus with research conducted by Deeds and Barrick (1986) and Camp and Bailey (1999).

Recommendations as a result of this study for further research have been developed and include:

1. Refine the student teaching placement process by collecting the same data from "current" student teachers both before and after the actual student teaching experience.

2. Due to the fact that the researcher was unable to determine what actual student teacher placement measures each teacher education program utilized, a more in-depth and direct measure should be used to examine the actual procedures used by different teacher education programs in placing student teachers.
3. Develop a series of discussion groups of agriculture teacher education faculty to determine "Ideal Student Teaching Placement Practices."
4. Student teaching documents from agriculture teacher education programs should be compared for innovative ideas and similarities. From these, a model set of student teaching elements should be prepared and disseminated for use in the agricultural education profession.
5. Qualitative (case study) measures should be used to examine how student teachers feel about how they were placed in a cooperating center, both before and after student teaching. It should be determined how the student teacher was placed, whether the teacher education program chose a cooperating center for them or the student teacher chose a center, or some other placement methodology was used, and compare this (using qualitative measures) with the quality of experience that the student teacher received.
6. Traditional student teaching should be compared to alternative certification field experience programs to determine if differences occur in the quality of these experiences related to continuing in the teaching field.

REFERENCES

Abel, F. J., Ansel, D., Hauwiller, J. G., & Sparapani, E. F. (1986). Enhancing the effectiveness of cooperating teachers. *Proceedings of the Sixty-Seventh Annual Meeting of the Association of Teacher Educators*, Houston, TX, *67*, 123-129.

American Federation of Teachers. (2002). *The report of the K-16 teacher education task force.* Retrieved October 8, 2002, from http://www.aft.org/

Andrews, L. O. (1966). *Student teaching*. New York: The Center for Applied Research in Education, Inc.

Beamer, R. W. (1981). The curriculum: Student experience programs. In V. R. Cardozier (Ed.), *Teacher education in agriculture* (pp. 198-233). Danville, IL: Interstate.

Berliner, D. C. (1985). Laboratory setting and the study of teacher education. *Teacher Education, 36*(6), 2-8.

Berkey, A. L. (Ed.). (1981). *Teacher education in agriculture* (2nd ed.). Danville, IL: The Interstate.

Borne, C., & Moss, J. W. (1988) Effectiveness of agricultural education student teaching in the southern region of the united states. *Proceedings of the Thirty-Seventh National Agricultural Education Research Meeting Southern Region Agricultural Education Conference*, Orlando, FL, *39*, 29-34.

Brown, D. W. (1989). Coping with competencies. *The Agricultural Education Magazine, 61*(9), 4.

Bullough, R. V., Young, J., Erickson, L., Birrell, J. R., Clark, D. C., & Egan, M. W. (2002). Rethinking field experience: Partnership teaching versus single-placement teaching. *Journal of Teacher Education, 53*(1), 68-80.

Burstein, N. D. (1988). From observing to teaching: An examination of relationships between student teachers activities, perceptions, and performance. *Proceedings from the Twenty-Third Annual Meeting of the American Educational Research Association*, New Orleans, LA, *27*, 95-103.

Burton, L. D. (1988). Tomorrow's teachers of agriculture. *The Agricultural Education Magazine, 60 (*7), 14.

Byler, B. L., & Byler, L. F. (1984). Analysis of student teacher morale before and after student teaching. *The Journal of the American Association of Teacher Educators in Agriculture, 25*(3), 22-28.

Camp, W. G. (2000). *A national study of the supply and demand for teachers of agricultural education in 1996-1998.* Blacksburg, VA: Division of Vocational and Technical Education, Virginia Polytechnic Institute and State University.

Camp, W. G., & Bailey, B. F. (1999). Student teaching in agricultural Education. *Proceedings of the Southern Agricultural Education Research Meeting,* Memphis, TN, *49*, 62-73.

Camp, W. G., & Crunkilton, J. R. (1985). History of agricultural education in america: The great individuals and events. *The Journal of the American Association of Teacher Educators in Agriculture, 28*(1), 57.

Campbell, J. R. (1995). *Reclaiming a lost heritage: Land grant and other higher education initiatives for the twenty-first century*. Ames: Iowa State University Press.

Case, L. D. (1985). Planning vocational agriculture programs under the Carl D. Perkins Vocational Education Act of 1984. *The Agricultural Education Magazine, 58*(1), 7-8.

Conant, J. B. (1963). *The education of American teachers*. New York: McGraw-Hill Book Company.

Cox, D. E., & McCormick, F. G. (1978). Supervised leadership development for prospective agriculture teachers: One approach. *The Agricultural Education Magazine, 50*(8), 186.

Cruickshank, D. R. (1985). *Models for the preparation of America's teachers*. Bloomington, IN: The Phi Delta Kappa Educational Foundation.

Davis, J. A. (1971). *Elementary survey analysis*. Englewood Cliffs, NJ: Prentice- Hall.

Deeds, J. P., Arrington, L. R., & Flowers, J. L. (1988). Cooperating teachers attitudes regarding cooperating teachers and student teaching experience expectations in vocational agriculture in three states. *Proceedings of the Thirty-Seventh Annual Southern Region Research Conference in Agricultural Education*, Orlando, FL, *37*, 34-45.

Deeds. J. P., & Barrick, R. K. (1986). Relationships between attitudes of pre-service agricultural education majors and variables related to early field-based experience. *Journal of Agricultural Education, 27*(3), 2-7.

Deeds, J. P., Flowers, J., & Arrington, L. R. (1991). Cooperating teachers attitudes and opinions regarding agricultural education student teaching expectations and policies. *Journal of Agricultural Education, 32*(2), 2-9.

Denton, J., Peters, W., & Savage, T. (1984). *New directions in teacher education: Foundations, curriculum, policy*. College Station, TX: Instructional Research Laboratory.

Devor, J. W. (1964). *The experience of student teaching.* New York: The Macmillan Company.

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. New York: The Macmillan Company.

Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method* (2nd ed.). New York: John Wiley & Sons, Inc.

Dyer, J. E. (Ed.). (2002). *AAAE directory of university faculty in agricultural education*. University of Florida, Gainesville.

Flatt, W. P. (1987). The future of agricultural education in secondary schools from the perspective of land grant universities. *The Agricultural Education Magazine, 60*(4), 21-22.

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction* (6th ed.). White Plains, NY: Longman Publishers, USA.

Goodland, J. I. (1990). Better teachers for our nation's schools. *Phi Delta Kappan, 72*, 185-194.

Guyton, E., & McIntyre, D. J. (1990). Student teaching and school experiences. In W. R. Houston (Ed.), *Handbook of research on teacher education* (pp. 514-534). New York: Macmillan.

Harlin, J. F., Edwards, M. C., & Briers, G. E. (2002). A comparison of student teachers' perceptions of important elements of the student teaching experience before and after an 11-week field experience. *Journal of Agricultural Education, 43*(3), 72-83.

Henry, M. (1989). Change in teacher education: Focus on field experiences. In Henry, M. (Ed.), *Reforming teacher education* (pp. 69-95), New York: Garland Publishing, Inc

Hillison, J. (1987). Agricultural teacher education preceding the smith-hughes act. *Journal of the American Association of Teacher Education in Agriculture, 28*(2), 8-17.

Hopkins, W. S. & Moore, K. D. (1993). *Clinical supervision: A practical guide to student teacher supervision*. Madison, WI: Brown and Benchmark.

Hutchinson, J. H. (1961). *A study of the participating experiences of student teachers of vocational agriculture*. Unpublished doctoral dissertation, Louisiana State University, Baton Rouge.

Key, J. P., & Price, R. R. (1987). Teacher education in agriculture: Provisions of the Smith-Hughes legislation. *The Agricultural Education Magazine, 59*(8), 19-20.

Kirts, C. & Claycomb, D. (1981). Student teaching management in agricultural education: A national study. *Journal of the American Association of Teacher Educators in Agriculture, 22*(1), 41-47.

Koehler, V. (1986). *Reality and reform in clinical teacher education*. New York: Random House.

Koziol, S., Minnick, J., & Sherman, M. (1996). What student teaching evaluation instruments tell us about emphases in teacher education. *Journal of Personnel Evaluation in Education, 10*(1), 53-74.

Lelle, M. A. & Kotrlik, J. W. (1987). The opinions of vocational agriculture teachers toward state supervision and teacher education in agriculture. *Journal of the American Association of Teacher Educators in Agriculture, 28*(4), 21-25.

Lucio, W. H. & McNeil, J. D. (1979). *Supervision in thought and action*. New York: McGraw-Hill Book Co.

Lynch, R. (2000). High school vocational education: Past and present. In R. Lynch (Ed.), *New directions for high school career and technical education in the 21st century* (pp. 7-20).

Martin, H. W. & Berkey, A. L. (1981). Development of teacher education in agriculture. In A. L. Berkey (Ed.), *Teacher education in agriculture* (pp. 1-30). Danville, IL: The Interstate.

Marvin, R. P. (1981). The curriculum: Field-centered experiences. In A. L. Berkey (Ed.), *Teacher education in agriculture* (pp. 161-172).

McGhee, M. B., & Cheek, J. G. (1989). Assessment of the preparation and career patterns of agricultural education graduates, 1975-1985. *Proceedings of the Sixteenth National Agricultural Education Research Meeting Southern Region Agricultural Education Conference,* Orlando, FL, *16*, 20-29.

Moore, G. E. (1987). The status of agricultural education prior to the Smith-Hughes act. *The Agricultural Education Magazine, 59*, 8-10.

Naisbitt, J. & Aburdene, P. (1990). *Megatrends 2000: Ten new directions for the 1990's*. New York: William Morrow & Company.

National Council for Accreditation of Teacher Education. (1960). *Standards and guide for accreditation of teacher education*. Washington, D.C.

National Council for the Accreditation of Teacher Education. (2002). *Standard #3 – Early field experience and clinical practice*. Retrieved October 8, 2002, from http://www.ncate.org

National FFA Organization (2003). *Local program success guide 2002-2003*. Retrieved December 1, 2002, from http://www.ffa.org/

National FFA Organization (2002). *Student development – SAE ideas.* Retrieved December 1, 2002, from http://www.ffa.org/

National Research Council. (1988). *Understanding agriculture: New directions for education*. Committee on Agricultural Education in Secondary Schools, Washington, D.C.

National Research Council. (1995). *Colleges of agriculture at the land grant universities: Public service and public policy.* Committee on the Future of the Colleges of Agriculture in the Land Grant System: Board on Agriculture, Washington, D.C.

Nelson, C. L. (1981). The need for teacher education in agriculture. In A. L. Berkley (Ed.), *Teacher education in agriculture* (pp.31-38). Danville, IL: The Interstate.

Norris, R. J. & Larke, A. (1989). Selection of student teaching centers and cooperating teachers in agriculture and expectations of teacher educators regarding these components of a teacher education program: A national study. *Proceedings of the Thirty-Eighth Southern Agricultural Education Research Meeting*, Jackson, MS, *38*, 135-142.

Patterson, R. S., Michelli, N. M., & Pacheco, A. (1990). *Centers of pedagogy: New structures for educational renewal.* San Francisco: Jossey-Bass.

Report of the K-16 Teacher Education Task Force: American Federation of Teachers. (2000). *Building a profession: Strengthening teacher preparation and induction.* Washington, D.C.

Rome, C., & Moss, J. W. (1990). Satisfaction with agricultural education student teaching. *Journal of Agricultural Education, 31*(2), 29-34.

Saylor, G. (1960). Secondary education development. In C. W. Harris (Ed.), *Encyclopedia of education research* (pp. 12-38). New York: Macmillian Company.

Sears, J., Marshall, J., & Wilborn, A. (1994). Student teaching: Saving reality for last. In Sears, J. (Ed.), *When best doesn't equal good* (pp. 131-133). New York: Teachers College Press.

Smith, J. & Souviney, R. (1997). The internship in teacher education. *Teacher Education Quarterly, 24*(2), 5-19.

Stevens, G. Z., & Howell, D. L. (1983). Historical perspective of agricultural education. In D. W. Howell, W. I. Lindley, R. H. Morton, G. Z. Stevens, & E. P. Yoder (Eds.), *Elements of the structure of agricultural education in the United States of America* (pp. 11-17). France: Unesco.

Swanson, H. B. (1942). Teacher training in agriculture. In R. W. Stimson & F. W. Lanthrop (Eds.), *History of agricultural education of less than college grade in the United States* (p. 516), Washington D. C.: Government Printing Office.

True, A. C. (1929). A history of agricultural education in the United States: 1785-1925. In L. A. Cremlin (Ed.), *American education: Its men, ideas, and institutions*. Washington, DC: United States Department of Agriculture.

Wentling, T. L. (1980). *Evaluating occupational education and training programs*. Boston, MA: Allyn and Bacon.

Wiegers, G. W. (1981). The curriculum: Professional education. In V. R. Cardozier (Ed.), *Teacher education in agriculture* (pp. 160-197). Danville, IL: The Interstate.

APPENDIX A

HEAD TEACHER EDUCATOR INSTRUMENT

SURVEY OF HEAD TEACHER EDUCATORS IN AGRICULTURE

Important Elements of the Student Teaching Experience and Methods of Student Teaching Placement

Survey of **Head Teacher Educators** in Agriculture

Demographic Information

1) Gender (*Please check*)

☐ Male
☐ Female

2) Ethnicity (*Please check*)

☐ African American
☐ Asian American
☐ Hispanic
☐ Native American / Alaskan
☐ Pacific Islander
☐ White
☐ Other_____

3) Professorial Rank (*Please check*)

☐ Adjunct Faculty
☐ Assistant Professor
☐ Associate Professor
☐ Instructor / Lecturer
☐ Professor
☐ Other_____

4) Tenure Status(*Please check*)

☐ Tenured
☐ Not tenured, but tenure track
☐ Not tenure track

5) Highest degree earned (*Please check* **one**)

☐ Ph. D.

☐ Ed. D.

☐ MA, MS, MBA, MAT

☐ BA, BS, BEd

6) Please indicate the approximate percentage (%) of your "work" time that you spend in carrying out your professional role:

Teaching (% of time)	
Research (% of time)	
Outreach / Extension/Service (% of time)	
	100%

7) What percent (%) of your effort do you spend on teacher education? ☐

8) How many ***total years have you been employed*** in higher education? ☐

9) How many ***years have you been employed in your*** present institution? ☐

Please circle the number corresponding to the response indicating your level of importance with each statement below.

1 = Unimportant **2 = Of Little Importance** **3 = Moderately Important** **4 = Important** **5 = Very Important**

The Ideal Cooperating Center should have:	**Unimportant**	**Of Little Importance**	**Moderately Important**	**Important**	**Very Important**
10) Agriculture mechanics laboratory.	**1**	**2**	**3**	**4**	**5**
11) Greenhouse/horticulture facilities	**1**	**2**	**3**	**4**	**5**
12) Meats laboratory.	**1**	**2**	**3**	**4**	**5**
13) Aquaculture Facility.	**1**	**2**	**3**	**4**	**5**
14) Land Laboratory.	**1**	**2**	**3**	**4**	**5**
15) Project Center for SAE Projects.	**1**	**2**	**3**	**4**	**5**
16) Email Access.	**1**	**2**	**3**	**4**	**5**
17) Access to the World Wide Web.	**1**	**2**	**3**	**4**	**5**
18) Student Access to Technology.	**1**	**2**	**3**	**4**	**5**
19) An active FFA Chapter.	**1**	**2**	**3**	**4**	**5**
20) Cooperation from Local Administration.	**1**	**2**	**3**	**4**	**5**
21) A clean safety record.	**1**	**2**	**3**	**4**	**5**
22) A requirement for all students to participate in a Supervised Agricultural Experience.	**1**	**2**	**3**	**4**	**5**
23) A record of outstanding accomplishments.	**1**	**2**	**3**	**4**	**5**
24) A student/teacher ratio of 75 or fewer students to one teacher.	**1**	**2**	**3**	**4**	**5**
25) An updated library.	**1**	**2**	**3**	**4**	**5**

The Ideal Cooperating Center should be:	**Unimportant**	**Of Little Importance**	**Moderately Important**	**Important**	**Very Important**
26) Used only once a year.	**1**	**2**	**3**	**4**	**5**
27) Located in a comprehensive high school.	**1**	**2**	**3**	**4**	**5**
28) A multiple teacher agriculture department.	**1**	**2**	**3**	**4**	**5**

Please circle the number corresponding to the response indicating your level of importance with each statement below.

1 = Unimportant **2 = Of Little Importance** **3 = Moderately Important** **4 = Important** **5 = Very Important**

The Ideal Cooperating Teacher should:	**Unimportant**	**Of Little Importance**	**Moderately Important**	**Important**	**Very Important**
29) Practice good student management skills in both the classroom and laboratory environment.	**1**	**2**	**3**	**4**	**5**
30) Display continual professional growth.	**1**	**2**	**3**	**4**	**5**
31) Practice good housekeeping in the classroom and laboratory.	**1**	**2**	**3**	**4**	**5**
32) Dress in an exemplary manner.	**1**	**2**	**3**	**4**	**5**
33) Have a teaching style observed by the teacher education program.	**1**	**2**	**3**	**4**	**5**
34) Be willing to be a mentor.	**1**	**2**	**3**	**4**	**5**
35) Support other school activities.	**1**	**2**	**3**	**4**	**5**
36) Have a positive attitude.	**1**	**2**	**3**	**4**	**5**
37) Be a good role model.	**1**	**2**	**3**	**4**	**5**
38) Communicate clear expectations to the student teacher.	**1**	**2**	**3**	**4**	**5**
39) Provide frequent evaluations and feedback to the student teacher.	**1**	**2**	**3**	**4**	**5**
40) Have discipline policies in place.	**1**	**2**	**3**	**4**	**5**
41) Practice a variety of teaching methodology.	**1**	**2**	**3**	**4**	**5**
42) Assist the student teacher in job placement.	**1**	**2**	**3**	**4**	**5**
43) Train Leadership Development Event and Career Development Event teams to reinforce student learning.	**1**	**2**	**3**	**4**	**5**
44) Be willing to make changes in daily activities for student teachers.	**1**	**2**	**3**	**4**	**5**

Student Teacher Placement Methods:

Please circle the number corresponding to the response indicating your level of importance with each statement below.

1=Unimportant 2=of little importance 3=Moderately Important 4=Important 5=Very important

In our teacher education program, we….	***Please check if your program uses this method to place student teachers. (You may check more than one).*** ↓	**Unimportant**	**Of little importance**	**Moderately Important**	**Important**	**Very Important**
45) Place student teachers by a joint effort of the agricultural education faculty.		**1**	**2**	**3**	**4**	**5**
46) Place student teachers by a joint effort of the agricultural education faculty and the student teacher.		**1**	**2**	**3**	**4**	**5**
47) Use cooperating centers that are relatively close to the University.		**1**	**2**	**3**	**4**	**5**
48) Use cooperating teachers that hold a Master's degree.		**1**	**2**	**3**	**4**	**5**
49) Allow student teachers to pick cooperating centers and cooperating teachers from a compiled list.		**1**	**2**	**3**	**4**	**5**
50) Use cooperating teachers having at least three years experience.		**1**	**2**	**3**	**4**	**5**
51) Allow cooperating teachers to pick student teachers from a compiled list.		**1**	**2**	**3**	**4**	**5**
52) Use cooperating centers only once a year.		**1**	**2**	**3**	**4**	**5**
53) Interview student teachers.		**1**	**2**	**3**	**4**	**5**
54) Use input from the State Department.		**1**	**2**	**3**	**4**	**5**
55) Collect data from the student teachers.		**1**	**2**	**3**	**4**	**5**

56) If a placement process is not listed that your teacher education program uses, please explain the process.

_____

_____

_____

Student Teachers for the 2001 – 2002 School Year

Please provide the researcher with information regarding the names and contact information of the student teachers who graduated from your institution in the 2001 – 2002 school year (Fall 2001 thru Summer 2002). ***We will send <u>each</u> of your student teachers the attached questionnaire. (see yellow questionnaire).***

Name of Student Teacher	*Address (current Teaching site or Other Occupation)*	*Phone Number*

APPENDIX B

COVER LETTER – HEAD TEACHER EDUCATOR

SURVEY OF HEAD TEACHER EDUCATORS IN AGRICULTURE

Your program of teacher education has been selected randomly from the American Association for Agricultural Education (AAAE) list of 83 teacher education programs to participate in a special project. In order for others to learn more about your program, a short questionnaire has been specially developed. The information will be used to inform others about your perceptions of important elements of the student teaching experience. You will not include your name or other identifying information on the questionnaire. You and your school's responses will be completely confidential.

Directions:

- Please fill out the **blue copy (student teacher placement methods)** of the instrument and **distribute the white copies** to the **remaining faculty** who work with student teachers at your institution.
- Please read each question carefully and answer truthfully.
- Please **circle** the appropriate response.
- **IF YOUR PROGRAM HAD STUDENT TEACHERS IN THE 2001-2002 SCHOOL YEAR, PLEASE INCLUDE THE NAMES, ADDRESSES, AND PHONE NUMBERS OF THESE INDIVIDUALS ON THE PROVIDED LIST.** ***Each person will be distributed a survey asking their rating of their experience as a student teacher.***

We know your time is valuable; therefore this instrument has been kept as short as possible (approximately 15 minutes to complete). Please complete the survey and return it to us in the enclosed envelope. If you have any questions concerning the survey or this study, please contact **Doug Morrish** at **(979) 458-1021** or by email at **dmorrish@tamu.edu** or **Julie Harlin** at **(979) 862-3014** or by email at **j-harlin@tamu.edu**. "This research study has been reviewed and approved by the Institutional Review Board-Human Subjects in Research, Texas A&M University. For research-related problems or questions regarding subjects' rights, you can contact the Institutional Review Board through Dr. Michael Buckley, Director of Support Services, Office of Vice President for Research at (979) 458-4067." We truly appreciate your time and thank you for participating. **PLEASE RETURN BY NOVEMBER 11TH.**

SINCERELY,

Doug Morrish
Graduate Teaching Assistant

Julie Harlin
Assistant Professor

APPENDIX C

TEACHER EDUCATOR INSTRUMENT

SURVEY OF TEACHER EDUCATORS IN AGRICULTURE

Important Elements of the Student Teaching Experience

Survey of **Teacher Educators** in Agriculture

Demographic Information

1) Gender (*Please check*)

- ☐ Male
- ☐ Female

2) Ethnicity (*Please check*)

- ☐ African American
- ☐ Asian American
- ☐ Hispanic
- ☐ Native American / Alaskan
- ☐ Pacific Islander
- ☐ White
- ☐ Other_____

3) Professorial Rank (*Please check* **one**)

- ☐ Adjunct Faculty
- ☐ Assistant Professor
- ☐ Associate Professor
- ☐ Instructor / Lecturer
- ☐ Professor
- ☐ Other_____

4) Tenure Status(*Please check*)

- ☐ Tenured
- ☐ Not tenured, but tenure track
- ☐ Not tenure track

5) Highest degree earned (*Please check*)

☐ Ph. D.

☐ Ed. D.

☐ MA, MS, MBA, MAT

☐ BA, BS, BEd

6) Please indicate the approximate percentage (%) of your "work"time you spend in carrying out your professional role:

Teaching (% of time)	
Research (% of time)	
Outreach / Extension/Service (% of time)	
	100%

7) What percent (%) of your effort do you spend on teacher education? ☐

8) How many ***total years have you been employed*** in higher education? ☐

9) How many ***years have you been employed in your*** present institution? ☐

Please circle the number corresponding to the response indicating your level of importance with each statement below.

1 = Unimportant **2 = Of Little Importance** **3 = Moderately Important** **4 = Important** **5 = Very Important**

The Ideal Cooperating Center should have:	**Unimportant**	**Of Little Importance**	**Moderately Important**	**Important**	**Very Important**
10) Agriculture mechanics laboratory.	**1**	**2**	**3**	**4**	**5**
11) Greenhouse facilities.	**1**	**2**	**3**	**4**	**5**
12) Horticulture facility (not a greenhouse).	**1**	**2**	**3**	**4**	**5**
13) Meats laboratory.	**1**	**2**	**3**	**4**	**5**
14) Aquaculture facility.	**1**	**2**	**3**	**4**	**5**
15) Land laboratory.	**1**	**2**	**3**	**4**	**5**
16) Project Center for SAE projects.	**1**	**2**	**3**	**4**	**5**
17) Email Access.	**1**	**2**	**3**	**4**	**5**
18) Access to World Wide Web.	**1**	**2**	**3**	**4**	**5**
19) Student Access to Technology.	**1**	**2**	**3**	**4**	**5**
20) An active FFA Chapter.	**1**	**2**	**3**	**4**	**5**
21) Cooperating for Local Administration.	**1**	**2**	**3**	**4**	**5**
22) A clean safety record.	**1**	**2**	**3**	**4**	**5**
23) A requirement for all students to participate in a Supervised Agricultural Experience.	**1**	**2**	**3**	**4**	**5**
24) A record of outstanding accomplishments.	**1**	**2**	**3**	**4**	**5**
25) A student / teacher ratio of 75 or fewer students to one teacher.	**1**	**2**	**3**	**4**	**5**
26) An updated library.	**1**	**2**	**3**	**4**	**5**

The Ideal Cooperating Center should be:	**Unimportant**	**Of Little Importance**	**Moderately Important**	**Important**	**Very Important**
27) Used only once a year.	**1**	**2**	**3**	**4**	**5**
28) Located in a comprehensive high school.	**1**	**2**	**3**	**4**	**5**
29) Multiple teacher agriculture departments.	**1**	**2**	**3**	**4**	**5**

Please circle the number corresponding to the response indicating your level of importance with each statement below.

1 = Unimportant **2 = Of Little Importance** **3 = Moderately Important** **4 = Important** **5 = Very Important**

The Ideal Cooperating Teacher should:	**Unimportant**	**Of Little Importance**	**Moderately Important**	**Important**	**Very Important**
30) Practice good student management skills in both the classroom and laboratory environment.	**1**	**2**	**3**	**4**	**5**
31) Display continual professional growth.	**1**	**2**	**3**	**4**	**5**
32) Practice good housekeeping in the classroom and laboratory.	**1**	**2**	**3**	**4**	**5**
33) Dress in an exemplary manner.	**1**	**2**	**3**	**4**	**5**
34) Have a teaching style observed by the teacher education program.	**1**	**2**	**3**	**4**	**5**
35) Be willing to be a mentor.	**1**	**2**	**3**	**4**	**5**
36) Support other school activities.	**1**	**2**	**3**	**4**	**5**
37) Have a positive attitude.	**1**	**2**	**3**	**4**	**5**
38) Be a good role model.	**1**	**2**	**3**	**4**	**5**
39) Communicate clear expectations to the student teacher.	**1**	**2**	**3**	**4**	**5**
40) Provide frequent evaluations and feedback to the student teacher.	**1**	**2**	**3**	**4**	**5**
41) Have discipline policies in place.	**1**	**2**	**3**	**4**	**5**
42) Practice a variety of teaching methodology.	**1**	**2**	**3**	**4**	**5**
43) Assist the student teacher in job placement.	**1**	**2**	**3**	**4**	**5**
44) Train Leadership Development Event and Career Development Event teams to reinforce student learning.	**1**	**2**	**3**	**4**	**5**
45) Be willing to make changes in daily activities for student teachers.	**1**	**2**	**3**	**4**	**5**

APPENDIX D

COVER LETTER – TEACHER EDUCATOR

SURVEY FOR THE TEACHER EDUCATOR IN AGRICULTURAL EDUCATION

Your program of teacher education has been selected randomly from the American Association for Agricultural Education (AAAE) list of 83 teacher education programs to participate in a special project. In order for others to learn more about your program, a short questionnaire has been specially developed. The information will be used to inform others about your perceptions of important elements of the student teaching experience. You will not include your name or other identifying information on the questionnaire. You and your school's responses will be completely confidential.

Directions:

- Please read each question carefully and answer truthfully.
- Please **circle** the appropriate response.

We know your time is valuable; therefore this instrument has been kept as short as possible (approximately 15 minutes to complete). Please complete the survey and return it to us in the enclosed envelope. If you have any questions concerning the survey or this study, please contact **Doug Morrish** at **(979) 458-1021** or by email at **dmorrish@tamu.edu** or **Julie Harlin** at **(979) 862-3014** or by email at **j-harlin@tamu.edu** "This research study has been reviewed and approved by the Institutional Review Board-Human Subjects in Research, Texas A&M University. For research-related problems or questions regarding subjects' rights, you can contact the Institutional Review Board through Dr. Michael Buckley, Director of Support Services, Office of Vice President for Research at (979) 458-4067." We truly appreciate your time and thank you for participating. **PLEASE RETURN BY NOVEMBER 11TH.**

SINCERELY,

Doug Morrish
Graduate Teaching Assistant

Julie Harlin
Assistant Professor

APPENDIX E

STUDENT TEACHER INSTRUMENT

SURVEY OF STUDENT TEACHERS IN AGRICULTURE (2001-2002 SCHOOL YEAR)

Important Elements of the Student Teaching Experience

Survey of Student Teachers in Agriculture

(2001-2002 School Year)

Demographic Information

1) Gender (*Please check*)

☐ Male
☐ Female

2) Age (yrs.) ☐

3) Ethnic Identity (*Please check*)

☐ African American
☐ Asian American
☐ Hispanic
☐ Native American / Alaskan
☐ Pacific Islander
☐ White
☐ Other_____

4) What is your current occupation/job?

☐ Teaching Agricultural Education
☐ Graduate School
☐ Working outside agriculture or education
☐ Unemployed
☐ Teaching another subject
☐ Working in Ag Industry
☐ Other_____

5) Do you plan to obtain teacher certification/licensing/credentialing in other areas? (*Please check*)

☐ No other teacher certification
☐ Yes, in composite science
☐ Yes, in life-earth science
☐ Yes, in biology
☐ Yes, in areas outside science

6) How many years do you expect to teach agriscience (*Please check*)

☐ I do not plan to teach agriscience ☐ 6 – 10 years

☐ 1- 2 years ☐ 11 or more years

☐ 3 – 5 years

7) In what size school did you student teach? (*Please check*)

☐ 500 or less students ☐ 501 – 900 students

☐ 901 – 1200 students ☐ 1200 or more students

Please indicate whether or not your cooperating center (student teaching center) had the following:

8) Classrooms

☐ 1 classroom ☐ 2 classrooms

☐ 3 classrooms ☐ more than 3 classrooms

	YES	**NO**
9) Agricultural Mechanics Laboratory		
10) Greenhouse		
11) Some other Horticulture facility		
12) Meats laboratory		
13) Aquaculture facility		
14) Land laboratory		
15) Project center/feeding facility		

Please circle the number to the response indicating your level of agreement or disagreement with each statement below.

1 = Strongly Disagree 2 = Disagree 3 = Unsure 4 = Agree 5 = Strongly Agree

My Cooperating Center (Student Teaching Center) had:	**Strongly Disagree**	**Disagree**	**Unsure**	**Agree**	**Strongly Agree**
Classroom and Laboratory Instruction					
16) A daily and systematic routine for classroom and laboratory instruction.	**1**	**2**	**3**	**4**	**5**
17) A discipline management plan used in a structured environment.	**1**	**2**	**3**	**4**	**5**
18) Current technology used in instruction.	**1**	**2**	**3**	**4**	**5**
19) Creative teaching methods as a basis for day-to-day instruction (i.e.) use of multimedia, and varied teaching techniques.	**1**	**2**	**3**	**4**	**5**
Supervised Agricultural Experience Program					
20) All students meeting state SAEP requirements, with accurate recordbooks.	**1**	**2**	**3**	**4**	**5**
21) Diversity within the students' SAEPs.	**1**	**2**	**3**	**4**	**5**
22) Project supervision and explanation of this commitment.	**1**	**2**	**3**	**4**	**5**
Student Leadership Development (LDEs, CDEs, and other FFA Activities					
23) Student participation in advanced awards and degrees on the district, area, state, and national levels.	**1**	**2**	**3**	**4**	**5**
24) Strong classroom instruction in student leadership development.	**1**	**2**	**3**	**4**	**5**
25) These activities as essentials for a balanced program.	**1**	**2**	**3**	**4**	**5**
26) A history of successful participation.	**1**	**2**	**3**	**4**	**5**
27) Cooperating teachers who were familiar with current rules for participation in events (i.e.) CDEs and LDEs	**1**	**2**	**3**	**4**	**5**
28) Cooperating teachers who delegated the training of at least one team to the student teacher.	**1**	**2**	**3**	**4**	**5**
29) Resources to train a competitive team.	**1**	**2**	**3**	**4**	**5**
30) Opportunities for the student teacher to judge or monitor a district or area LDE.	**1**	**2**	**3**	**4**	**5**
School and Community Relationships					
31) Recognized integrity of the cooperating teacher and program.	**1**	**2**	**3**	**4**	**5**

My Cooperating Center (Student Teaching Center) had:	**Strongly Disagree**	**Disagree**	**Unsure**	**Agree**	**Strongly Agree**
32) Departmental support organizations (i.e.) advisory councils, booster clubs, and Alumni.	**1**	**2**	**3**	**4**	**5**
33) A cooperating teacher who supported activities in the community (i.e.) service organizations	**1**	**2**	**3**	**4**	**5**
34) A spirit of professional cooperating among teachers.	**1**	**2**	**3**	**4**	**5**
35) School administrators who were involved in program activities.	**1**	**2**	**3**	**4**	**5**
36) Community service projects.	**1**	**2**	**3**	**4**	**5**
37) Availability of facilities (i.e.) computer labs, shops, school farm.	**1**	**2**	**3**	**4**	**5**
Cooperating Teacher and Student Teacher Relationships					
38) A cooperating teacher who was willing to be my mentor.	**1**	**2**	**3**	**4**	**5**
39) A cooperating teacher who had a positive attitude.	**1**	**2**	**3**	**4**	**5**
40) A cooperating teacher who was a "good" role model to me.	**1**	**2**	**3**	**4**	**5**
41) A cooperating teacher who communicated clear expectations to me as the student teacher.	**1**	**2**	**3**	**4**	**5**
42) A cooperating teacher who provided frequent evaluations and feedback to me as the student teacher.	**1**	**2**	**3**	**4**	**5**
43) Discipline policies that were in place and enforced.	**1**	**2**	**3**	**4**	**5**
44) "Reinforcement" techniques in teaching (i.e.) pace, reteaching, retesting, and accommodation of various learning styles.	**1**	**2**	**3**	**4**	**5**

Please circle the number to the response indicating your level of agreement or disagreement with each statement below.

1 = Strongly Disagree 2 = Disagree 3 = Unsure 4 = Agree 5 = Strongly Agree

Overall Student Teaching Experience	**Strongly Disagree**	**Disagree**	**Unsure**	**Agree**	**Strongly Agree**
48) Student teaching was a positive experience.	**1**	**2**	**3**	**4**	**5**
49) I was thoroughly pleased with my overall student teaching experience.	**1**	**2**	**3**	**4**	**5**
50) My cooperating center was an excellent facility.	**1**	**2**	**3**	**4**	**5**
51) My cooperating teacher was helpful.	**1**	**2**	**3**	**4**	**5**
52) Student teaching is the most valuable component of the teacher education program.	**1**	**2**	**3**	**4**	**5**
53) Student teaching is a realistic example of actual teaching.	**1**	**2**	**3**	**4**	**5**
54) As a student teacher, I learned much from my student teaching experience.	**1**	**2**	**3**	**4**	**5**

APPENDIX F

COVER LETER – STUDENT TEACHER

SURVEY OF STUDENT TEACHERS IN AGRICULTURE (2001-2002 SCHOOL YEAR)

You have been selected to participate in a special project. Your student teaching program in which you graduated has been selected randomly from the American Association for Agricultural Education (AAAE) list of 83 teacher education programs. In order for others to learn more about your student teaching experience while at this institution, a short questionnaire has been specially developed. The information will be used to inform others about your perceptions of your student teaching experience. You will not include your name or other identifying information on the questionnaire. You and your school's responses will be completely confidential.

Directions:

- Please read each question carefully and answer truthfully.
- Please **circle** the appropriate response.

We know your time is valuable; therefore this instrument has been kept as short as possible (approximately 15 minutes to complete). Please complete the survey and return it to us in the enclosed envelope. If you have any questions concerning the survey or this study, please contact **Doug Morrish** at **(979) 458-1021** or by email at **dmorrish@tamu.edu** or **Julie Harlin** at **(979) 862-3014** or by email at **j-harlin@tamu.edu** "This research study has been reviewed and approved by the Institutional Review Board-Human Subjects in Research, Texas A&M University. For research-related problems or questions regarding subjects' rights, you can contact the Institutional Review Board through Dr. Michael Buckley, Director of Support Services, Office of Vice President for Research at (979) 458-4067." We truly appreciate your time and thank you for participating. PLEASE RETURN THE COMPLETED SURVEY BY **February 7th.**

SINCERELY,

Doug Morrish
Graduate Teaching Assistant

Julie Harlin
Assistant Professor

VITA

DOUGLAS GLENN MORRISH
12919 Advance Dr.
Houston, TX 77065

EDUCATION

Ph.D.	Texas A&M University, College Station, TX, Agricultural Education, Emphasis – Teacher Education, August 2003
M.S.	Stephen F. Austin State University, Nacogdoches, TX, General Agriculture, December, 2000
B.S.	Stephen F. Austin State University, Nacogdoches, TX, Animal Science, May 1996

PROFESSIONAL EXPERIENCE

Aug. 2000 – Present	Graduate Teaching Assistant, Department of Agricultural Education, Texas A&M University, College Station, TX
Aug. 1997 – May 2000	Agricultural Science and Technology Instructor – Jacksonville Independent School District, Jacksonville, TX
July 1996 – July 1997	Veterinary Technician – F.M. 1960 Animal Hospital, Houston, TX

SCHOLARLY ACTIVITIES

Aug. 2002	Senior Teaching Assistant Mentor for 12th Annual Teaching Assistant Training and Evaluation Program at Texas A&M University
Mar. 2002	Consultant Team Member for Evaluation of Agriculture Science Program, Groesbeck H.S., Groesbeck, TX
Dec. 2001	Development of Blinn College Alternative Teacher Certification Module on "Teaching in Texas"
Aug. 1997-1998	Innovative Course Proposal to Texas Natural Resource Conservation Commission and Texas Education Agency to Offer Class D Water Works to Texas High School Students in Agricultural Science